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ABSTRACT

Materials in the Initial Teaching Alphabet (ITA) were developed for use in remedial reading instruction of functionally illiterate adults. These materials were used for an experimental tutorial session totalling 20 hours of instruction and two hours of testing and interviewing. The tutorial sessions provided a case study for use in formative evaluation; an outline for a full summative evaluation is also included. The study concludes that ITA can be useful as an instructional medium for functionally illiterate adults, especially those with negligible or minimal reading skill levels.
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**THE INITIAL TEACHING ALPHABET AND
THE FUNCTIONALLY ILLITERATE ADULT:
A REVIEW OF SELECTED LITERATURE AND
DEVELOPMENT OF EXPERIMENTAL MATERIALS**

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L. B. F.

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CHAPTER I

Statement of the Problem

World Illiteracy and Frank C. Laubach's Programs

Illiteracy is a worldwide problem that has been explored in many ways (Jeffries, 1967). On the international level, research continues under the direction of the United Nations (UNESCO, 1957, 1973). Literacy training on the international level has been provided in another manner as well. Missionaries have provided literacy training services in countries around the world.

Frank C. Laubach's "each one, teach one" program has been a factor in the world campaign toward literacy.

Biographical information on Laubach details his entrance and participation in the field of literacy (Medary, 1954). Laubach himself recounts his efforts in the book Forty Years with the Silent Billion in which he described his observation of the problems and the progression of his efforts to overcome illiteracy (Laubach, 1970). Laubach's son, Robert S. Laubach worked with his father in the area of materials development. In the text, Toward World Literacy: The Each One, Teach One Way, (Laubach & Laubach, 1960) the development of their materials is explained and demonstrated. (See Appendix A).

Illiteracy in the United States

In the United States, one of the first literacy training programs was developed with the guidance of a teacher in the South in the early 1900's. This

program involved many different groups of people — both from the teaching profession and from the general public.

The first intensive efforts to implement organized learning for illiterate adults in this country came with the establishment of the famous 'Moonlight Schools' of Kentucky founded in 1911 by Cora Wilson Stewart, a dedicated teacher (Ward, 1961, p.vii).

Stewart was the chairman of the NEA Illiteracy Commission as well as the Chairman of the Illiteracy Committees of both the National Council of Education and the General Foundation of Woman's Clubs. Her text, Moonlight Schools, (1922) is a review of those programs. The remedial instruction conducted by Stewart and her colleagues did not distinguish between those who had attended school briefly and those who had never attended at all.

The need to conduct literacy training in World War I was recounted by Stewart but by World War II the Army's demands for literacy on the part of its soldiers was even greater. The scope of literacy training widened to serve this need. The term "functional illiterate" came into use at that time to describe a person over eighteen years old who had completed fewer than five years of school (Goldberg, 1951 cited in Brown & Newman, 1968).

Since the original Army usage, definitions of exact reading and age levels of the functionally illiterate adult have varied (Cass, 1956; Brown & Newman, 1968; Jeffries, 1967; Greenleigh Associates, 1966; Harman, 1967). The term, however, can be used as an indicator regardless of which exact definition is preferred. The term "functionally illiterate" is an immediate identification that the person has had some formal training in reading and that the person has not attained the skills necessary to read. In general, the functionally illiterate adult reads below the level necessary to read the daily newspaper or to follow the instructions

written on the label of a paint can (Weber, 1975, p.149). Cook (1977) reported that:

Samples of state forms, applications for driver's licenses, bank loans, and medical aid show that the average reading level of such materials is 10th grade or higher (p. 105).

Cook stressed the need for a flexible definition of adult literacy (pp. 120-121).

Whatever level is chosen for the definition, it is clear that more than a label is necessary to encompass the problem. In terms of functioning successfully, the adults must be able to integrate the skills they learn into every day life tasks (Harman, 1970).

Taking the skills usage approach to the problem, Northcutt, Selz, Shelton, Myer, Hickok, & Humble (1975) researched adult functional literacy in terms of competencies. They sought to:

Specify competencies which are functional to economic and educational success in today's society and to develop devices for assessing those competencies of the adult population of the United States (p. 1).

The result of the project, a four-year study funded by the U. S. Office of Education , was a redefinition of the concept of functional literacy. Northcutt et al. (1975) developed Adult Performance Level (APL) criteria. The APL theory states that functional literacy is more than grade level attainment. Functional literacy, in APL terms, is the ability to apply literacy skills to the competence areas necessary for "success" as an adult in the United States (p. 15).

Regardless of the exact definition of the term "functionally illiterate adult," the handicap to the individual who cannot read is often severe. The handicap to society as a whole, although less obvious, may be equally serious. An inability to read is often cited as a factor in an individual's lack of achievement (Pollack & Piekarz, 1963). If the lack of achievement should result in criminal activities or

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need for public assistance, then society as a whole would be supporting an individual whose illiteracy had hindered his supporting himself (Brown & Newman, 1968, p. 1). Substantial numbers of adult literacy training research projects have been conducted with individuals from prison populations and with groups from the welfare rolls. In the Introduction to Reading Problems and Problem Readers (Pollack & Piekarz, 1963), the need to help "retarded readers overcome their difficulties" is stressed.

A severe reading deficiency affects the personal adjustment and accomplishments of a person The large numbers of deficient readers on welfare are evidence of this. In fact, one of the most pressing social problems of our literate and technological civilization is finding employment for people who cannot read or who have limited reading ability (p. viii).

Investigating an Initial Learning Medium for Use in Adult Literacy Training

One approach toward dealing with the need for more effective literacy training has been the use of initial learning mediums. One such alphabet, introduced as the "Augmented Roman," now known as the "initial teaching alphabet" (i.t.a.), was developed by Sir James Pitman, grandson of Sir Isaac Pitman, originator of an early shorthand method (Downing, 1965, p. 4).

This study attempts to review the work done with the initial teaching alphabet and to develop materials in i.t.a. for use in the remedial reading instruction of functionally illiterate adults. The preliminary investigation will consist of a review of selected literature about i.t.a., about the functionally illiterate adult, about materials in i.t.a. used for remedial reading instruction for functionally illiterate adults, and about research studies employing i.t.a. as the medium of instruction.

The remainder of the thesis will be development of materials in i.t.a. for use in remedial reading instruction of the functionally illiterate adult. Formative evaluation is based on a case study with an accompanying preliminary outline for a full summative evaluation project. The author's conclusions, based on the work presented here, are contained in the final chapter.

CHAPTER II

A Review of Selected Literature on the Initial Teaching Alphabet and the Functionally Illiterate Adult

The review of literature will be presented in the following order. First will be a general introduction to the initial learning medium, now called i.t.a., as developed by Sir James Pitman. The section on i.t.a. will include a discussion of the formulation of i.t.a. and research during early development; a review of Pitman's interaction with George Bernard Shaw on the subject of alphabets; information about the linguistic system and graphics of i.t.a.; and, reviews of selected introductory literature dealing with the initial teaching alphabet.

Second will be an attempt to define the functionally illiterate adult. The definition will be based on a review of selected literature dealing with the problems of illiterate adults.

Third will be a review of selected remedial reading materials that have been developed in i.t.a. for adults. The section on materials will include information about the Missouri Project "Language for a Future" series (Heding, Ames, Artley, Grimsley, & Andrews, 1967), the i.t.a. Foundation materials development project (1975), the Sturgis "Freedom to Read" series (Baker, 1966), and the "Breakthrough" materials (Fink & Clavering, 1968).

The fourth part will be a review of selected research projects which employed i.t.a. for remedial reading instruction with functionally illiterate adults. The research review will be separated into three sections: general

studies, studies with military populations, and studies with prison populations. Geographic locations will be indicated along with the reviews.

Development of the Initial Teaching Alphabet

In the summer of 1960, the London University's Institute of Education, in association with the National Foundation for Educational Research in England and Wales, formulated a research program to test the effectiveness of an initial learning medium (Downing, 1962, p. 3). The project was formulated to "conduct a scientifically controlled experiment to test the effectiveness of i.t.a. for beginning reading. The Reading Research Unit was formed for this purpose" (Downing, 1967, pp. 80-81). Downing (1967) explained that the beginnings of public exposure to i.t.a. came with the founding of the research project (p. 80). Downing (1967) also explained that although other alphabets were available, notably those of the Simplified Spelling Society of Great Britain, L. G. Davis' New English Orthography, John R. Malone's Unifon, and Axel Wijk's Regularized English, at no time during the planning of the project was any other initial learning medium considered for experimentation (p. 94). The research was originated as a result of Pitman's continued efforts. He had "succeeded, after years spent in creating a favourable climate," (p. 162) to have the use of the initial learning medium investigated (Pitman & St. John, 1969). Pitman's initial teaching alphabet versus traditional orthography was the subject of the Reading Research Unit's project. Traditional orthography, referred to as t.o., is used instead of the phrase "orthodox alphabet and spelling" (Pitman & St. John, 1969, p. 52).

After the project began, a "rival reformer" Dr. Axel Wijk, author of Regularized English (1959) challenged the decision to pursue Pitman's experimental orthography (Downing, 1967, p. 75). Wijk characterized Pitman's work as the "product of a layman's speculation" (Downing, 1967, p. 75). Downing (1967) related that Wijk mounted an extensive campaign to have his system substituted for Pitman's (pp. 93-98). Pitman and St. John (1969) included a brief explanation of Wijk's system in the text, Alphabets and Reading, (pp. 316-317).

Pitman, however, considered himself a qualified professional. He had studied reading, the history of language and the spelling reform movements extensively (Pitman & St. John, 1969, Chap. 26). Pitman had been active for "over half a lifetime" in the spelling reform movement (Pitman & St. John, 1969, p. 111). Pitman was searching for a practical solution to the age-old academic conflict over English orthography (Pitman & St. John, 1969, chap. 6). A major point of contention was whether to introduce a new alphabet of phonetic value or to institute spelling reforms using the old alphabet (Downing, 1967, p. 69). Shaw proved to be unalterably opposed to the concept of spelling reform within the confines of the traditional romanian alphabet (Downing, 1967, p. 103). He considered the product of spelling reform attempts to be "ridiculous and even sometimes obscene" (Shaw, cited in Downing, 1967, p. 4). Pitman visited Shaw in 1947 and Shaw "converted" him away from the mainstream of the spelling reform movement (Pitman & St. John, 1969, p. 112).

Shaw proposed the formulation and the institution of a new alphabet. He hoped that the new alphabet would be used parallel to the old and gradually replace it as, after centuries of use, the arabic numerals had virtually supplanted roman numerals (Pitman & St. John, 1969, p. 105). In his will, Shaw left money

for research into formulation of a new non-roman alphabet (Pitman & St. John, 1969, p. 103). The alphabet was to have "at least 40 characters which would enable the English language to be written without indicating single sounds by groups of characters or by diacritical marks Of the 40 characters, 16 had to represent vowel sounds" (Shaw's will, cited in Pitman & St. John, 1969, p. 103). The will also provided "for a prize of £500 for any design accepted and . . . for the transliteration, publication, and presentation to every public library in the British Isles, the Commonwealth, and the United States of copies of Shaw's Androcles and the Lion printed on facing pages in the orthodox and the new alphabet" (Pitman & St. John, 1969, p. 104). (See Figure 1).

Although the will was contested, the competition was eventually carried out. There were 467 entries. Of these, one was selected as the most promising. It then was modified by its originator and the originators of the three next best entries to combine the best features of all four entries. The prize money was divided equally among the top four contenders (Pitman & St. John, 1969, pp. 104-105).

Pitman had been appointed to supervise the competition for the Shaw alphabet (Pitman & St. John, 1969, p. 112). He had managed the competition as "a labor of love and one that could not conceivably yield serious benefit in [his] own lifetime" (p. 112). Shaw's direction was at re-educating the literate public and, although the task was interesting to Pitman, it was not his actual goal (Downing, 1967, p. 69).

Pitman was influenced enough by Shaw's theories to leave the track of the spelling reform movement but his main concern was still with the mass of illiterate persons. Pitman sought to develop a concrete, viable system for

Figure 1 (Removed due to Copyright Restrictions)

An Example of the Alphabet Developed
as a Result of the Shaw Alphabet Contest
(From the Shaw Alphabet Edition of Androcles and the Lion,
Penguin Books, 1962, cited in Pitman and St. John, (1969, p. 104.)

dealing with the everyday problem of initial reading instruction. In his search, Pitman concentrated on the medium not the methodology to be used in teaching reading (Downing, 1965, chap. 1). The method of instruction with the new medium would be chosen by the instructor (Downing, 1962, p. 20). The medium would be designed to facilitate initial reading and to allow for transfer to traditional orthography once a certain level of reading proficiency had been attained (Pitman & St. John, 1969, p. 117).

Pitman based the initial learning medium on the work he had done with others from the Simplified Spelling Society of Great Britain, especially Mont Follick (Pitman & St. John, 1969, p. 99). Follick's major interest was in the learning problems of those studying English as a foreign language. Pitman's interest lay in the formulation of a better learning medium for the individual whose native language was English (Downing, 1967, p. 70). Follick used the traditional characters only while Pitman chose to try a different approach (Downing, 1967, p. 73). (See Figure 2.)

Pitman's approach was similar to that of John Hart in 1570 (Downing, 1967, p. 2). Hart sought to "take the best and leave the worst" with his "methods." He proposed new characters for some sounds, including those of "sh," "ch," and "th" (Pitman & St. John, 1969, p. 78FF). (See Figure 3.) Pitman decided to formulate an alphabet "adopting only those variations in characterization which became possible as improvements as soon as, and because he had taken the the decision not to limit himself to 23 of the 26 letters but to augment the deficiencies by new characters" (Pitman, cited in Downing, 1967, p. 75).

The result of Pitman's decision was a set of new characters, called augmentations, to supplement the traditional alphabet. (See Figure 4.) These
Figure 2 (Removed due to Copyright Restrictions)

Comparison of the Augmented Alphabet Developed Pitman (i.t.a.)

and the Digraphic Alphabet Developed by Follick

(Pitman and St. John, 1969, pp. 314-315.) 18

Figure 3 (Removed due to Copyright Restrictions)

Augmented Characters by John Hart

(Hart 1570, cited in Pitman & St. John, 1969, p. 58 ff.)

Figure 4

Selected Examples of Augmentations in the
Initial Teaching Alphabet and the Equivalent Characters
in the Traditional Alphabet

i.t.a.

wh
ch
th
th
sh
ng

t.o. equivalent

wh
ch
th (this)
th (the)
sh
ng

augmentations were to "bear a visual resemblance to and carry the familiar sound values of the roman characters or the pairs and groups of roman characters they replace" (Pitman & St. John, 1969, p. 117). Use of the retentions from the traditional alphabet and the augmentations devised by Pitman led to the apparently simple name "Augmented Roman Alphabet" and the initial learning medium was introduced as such. (See Figure 5.) Once introduced in the schools, however, the name proved to be too technical for popular understanding. It was changed because:

Many people, particularly parents, were confused by it and supposed that their children were to be taught in some extinct alphabet rather than an extended form of the alphabet with which they themselves were familiar (Pitman & St. John, 1969, p. 117).

Thus, the name initial teaching alphabet was substituted.

Pitman devised i.t.a. to simplify the process of learning to read English while retaining a look similar to traditional orthography. The similarity of appearance was to be an aid in transition to reading in traditional orthography once a certain level of reading proficiency was attained. The idea of proficiency must be stressed. Pitman's goal was to provide a medium for use in training people to be good readers, that is, readers who would be aware of the meaning of what they read. Although he carefully provided the visual clues, Pitman intended them to supplement, not supplant, reading for meaning (Pitman & St. John, 1969, p. 164). Twenty-four of the 44 i.t.a. characters are retentions from traditional orthography. The exclusions are "q" and "x." Twenty are augmentations, 14 of which are virtual combinations of symbols from t.o., leaving only six characters that are completely new. The augmentations were designed to aid transfer by careful preservation of the "top coastline" of the

Figure 5

The Augmented Roman Alphabet



traditional characters (Downing, 1967, P. 118). Pitman and St. John (1969) explain that the majority of recognition is found in the upper half of the characters (p. 144). (See Figure 6.) Thus throughout the development of i.t.a., the task of facilitating transition has been an equal factor to that of simplifying the beginning instruction of reading. Pitman sought to supplement traditional orthography, not replace it. Therefore continuity of visual forms as a factor in the initial learning medium since return to the traditional roman alphabet was an essential element of Pitman's plans (Downing, 1962, pp. 20-21).

Pitman's concern for the proper introduction of i.t.a. extended to the copyright laws protecting i.t.a. In order to allow free development of materials without the payment of royalties for using i.t.a., Pitman gave up all rights (Downing, 1967, p. 82-91). In the "appeal pamphlet" announcing i.t.a., Pitman made the following statement: "Any designer's rights have been freed for all time for unrestricted use by all" (Downing, 1967, p. 90). The characters themselves were designed by calligrapher Alfred Fairbank, the original copy of which is dated April 6, 1953 (Downing, 1967, p. 70). The first typefaces for i.t.a. were designed by C. N. Fellowes and D. H. J. Schenck, guided by Fairbank's characters. The "correct typographical description is the Ehrhardt Pitman Initial Teaching Alphabet" (Pitman & St. John, 1969, p. 117). Since then, additional typefaces corresponding to Century Schoolbook, Baskerville, Melio, Helvetica, and Opitma have been designed (Montague, 1970).

Pitman had spearheaded the design of i.t.a. and its donation to the public. He had spent years "creating a favorable climate" for the introduction of i.t.a. and had been successful in initiating research (Pitman, 1969, p. 655). The Reading Research Unit had begun its project in England and use of the

Figure 6 (Removed due to copyright restrictions)

i.t.a. Upper Coastline as Aid to Transition

(Pitman & St. John, 1969, p. 144)

experimental initial learning medium was underway. Pitman saw i.t.a. as a beginning and was willing to discuss changes that the research warranted. Downing and Colin Painter proposed two changes as shown in Figure 7. One was a change in the form of the character "did" and the other the addition of a character called "er," to make the neutral or central vowel (schwa) "more effectively characterized" (Downing, 1967, p. 76). These changes were implemented and are part of the current i.t.a. system.

Figure 7

Proposed Character Changes for the
Pitman Initial Learning Medium

d ("did") to be written d

er ("er") to be added to supplement ("ray") r

The Initial Teaching Alphabet as an Experimental Medium

Other changes to the writing system have been proposed, and are under consideration, as a result of further i.t.a. research (Downing, 1967, pp. 302-306). Downing stressed that i.t.a. was introduced as, and must be considered, an experimental medium. As such, i.t.a. must be "reshaped through scientific research to maximize the combined effects of simplicity and regularity at the beginning stage and similarity to t.o. for the transition stage" (1967, p. 302). In this manner, further refinements of i.t.a. can be continually pursued. Figure 8 shows the revised initial Teaching Alphabet.

Figure 8 (Removed due to copyright restrictions)

The Initial Teaching Alphabet

(Pitman & St. John, 1969, p. 119)

English always has been a difficult language to learn to read due, in part, to its spelling system. In i.t.a. there are "departures from phonemic perfection," but the task of sound representation is simplified from the traditional means (Pitman & St. John, 1969, p. 139). (See Figure 9.) Traditional orthography has over 2,000 alternate spellings of the 40 primary value English phonemes (p.139). The primary values of the 40 (or 40 plus one) phonemes are represented on a one-to-one relationship by the i.t.a. characters (Downing, 1967, p. 103; Pitman & St. John, 1969, p. 132). This relationship has lowered the number of "alternative spellings for the 40 phonemes of the English language...from over two thousand in traditional spelling to only eighty or ninety" in i.t.a. (Downing, 1962, p. 21). As Downing (1967) explained, "i.t.a. is not an absolutely regular code for English phonemes" (p. 102). To provide an exact correspondence would create too many characters to transfer at the time of transition.

Reading and transition, it must be remembered, were equal goals for Pitman. To accomplish both, Pitman had to "compromise between, on the one hand, the need for simplification and consistency for the beginning reading code and, on the other hand, the need to make i.t.a. compatible with the conventional orthography [to facilitate] transition.... Close compatibility between i.t.a. and standard print distinguishes Pitman's phonemic alphabet from other attempts to provide a simplified code for beginning readers" (Downing, 1965, p. 21).

Problems encountered during transition are a major concern for those studying about i.t.a. Anticipated problems of "relearning" or "unlearning" are viewed by Pitman as actually a process of "adjustment." Downing presents considerable evidence to support the claim that transition can be accomplished

Figure 9 (removed due to copyright restrictions)

Examples of the Variations in Sound

Representation of Traditional Orthography

(Downing, 1965, pp. 9-10)

readily (1964, pp. 95-144; 1967, chaps. V & VI). Transition actually begins almost immediately and is a continual process because any reader of any age is exposed daily to traditional orthography.

The process of transition has been discussed in field studies as well. The Royal Army Education Corps, School of Preliminary Education, began its use of i.t.a. in 1963 (Duxbury, 1965). The experience with transition at that school is reported by Stevenson:

Not only is the transition achieved without any difficulty, and with little or no regression, but that the students make the transfer in their own time when they themselves feel ready for the change -- it appears to be an almost unconscious act. The adult . . . is, of course, constantly making the transition in his daily routine, i.e., attempting to read newspapers, magazines, letters from home, etc. They are, therefore, reading and improving in t.o. all the time that they are acquiring confidence and fluency in i.t.a. (1973, p. 41).

Transition, the presumed "bête noire" (Stevenson's phrase) of i.t.a. was, in fact, a nonexistent problem for the students.

Pitman and St. John discussed transition in Alphabets and Reading (1969, pp. 141-146; 192-195; 248-249; 257ff). In terms of visual resemblance, "roughly speaking 50-60 per cent of words are virtually unchanged or subject to only minor modifications" (1969, p. 141). Since a majority of the words are similar, the balance can be taught in any method the instructor chooses.

Some teachers believe in dividing the transition into three intermediate stages: (1) the introduction of capitals and diagraphs (e.g., 'i' and 'e' separated . . .), (2) the introduction of 'regular' irregularities (e.g., mate, here, dine, bone, cube), (3) the introduction of 'shock' words like once, all, enough (in i.t.a., e.g. wuns . . .). (Pitman & St. John, 1969, p. 152).

All in all, Pitman saw the transition from i.t.a. to t.o. as the change "from the rational to the irrational, the systematic to the unsystematic" (Pitman & St. John, 1969, p. 144).

Another apparent area of difficulty to those encountering i.t.a. as theory is the number of characters found in i.t.a. Supporters claim i.t.a. simplifies the task of learning to read. "Simplify" seems a misnomer at first glance when one notices 26 characters in t.o. and 44 in i.t.a. Examining t.o. more closely, however, reveals that the variations in the characters of t.o. are actually more numerous than those of i.t.a. In i.t.a., capitalization is achieved by use of the same characters in a larger size. There is no other change in symbols (Downing, 1965, p. 71). Standard printed texts have the same characters as handwritten paragraphs (Pitman & St. John, 1969, p. 153). Theoretically, there are no extra forms to learn. The 26 t.o. characters change from lower case to upper case and again in handwritten samples, finally having a minimum of 63 possible forms (Downing, 1967, p. 87). Figure 10 shows some variations possible with each of ten words in traditional orthography.

However, once the 44 characters in i.t.a. have been mastered, any word spoken can be written. Any written word always sounds the same. Once students have mastered the i.t.a. characters, they have virtually unlimited opportunity for expression. Exceptions to this rule are found when i.t.a. typefaces are dissimilar and when materials are prepared without following Pitman's established conventions.

In summary, i.t.a. provides a consistent medium for encoding and decoding. The medium is consistent both in graphic and in phonemic representation. Transition to traditional orthography (i.e., to the orthodox alphabet and conventional spelling) is facilitated by the care exercised by Pitman in designing the initial learning medium.

Figure 10 (removed due to copyright restrictions)

Selected Written Variations of the Ten

Most Common Words in English

(Pitman & St. John, 1969, p. 52)

Literature About the Initial Teaching Alphabet

Further information about the initial teaching alphabet is readily available. Detailed analysis of i.t.a. is available in the book Alphabets and Reading (Pitman & St. John, 1969). This text delineates the history and theory of spelling reform movements from Elizabethan times to the present. Discussion of the linguistic principles followed to construct the initial teaching alphabet comprises another major portion of the book. Additional topics include implications for use of i.t.a. with physically or mentally handicapped learners, applications for use with non-English speaking students, reports from teachers using i.t.a. in the classroom, remedial uses of i.t.a., and results from various i.t.a. research projects. Alphabets and Reading is a full, scholarly treatment of the development and implementation of the initial teaching alphabet.

John Downing has written several books about Pitman's initial teaching alphabet. Downing was the "research officer" for the initial project using i.t.a. in Great Britain. To Be or Not To Be (Downing, 1962) is a book of introduction to i.t.a. written for the interested citizen not the professional educator. It is brief and direct, outlining the symbols and sounds and answering questions about the goals and use of i.t.a.

The Initial Teaching Alphabet Reading Experiment (Downing, 1965) is a compilation of three lectures on research in beginning reading using i.t.a. as well as a summary of i.t.a. research from 1961-1965. The lectures are interim reports on the research in three areas: phonics vs. sight reading, encoding and decoding, and transfer to traditional orthography.

Evaluating the Initial Teaching Alphabet (Downing, 1967) provides a thorough overview of the research into i.t.a. from 1960-1967. Downing's background as an experimental psychologist is evident in this technical review. An outline of the perceived problem, that is, the traditional orthography of English, is followed by a review of previous investigations. The historical material is followed by a background discussion and description of i.t.a. The next chapters explain the design and method of the first i.t.a. experiment and a discussion of the results. In answer to problems of variables and control, a second experiment was established to begin in 1963. The first experiment had entailed only 20 schools with 33 schools as the control group (Pitman & St. John, 1969, p. 164). The second experiment involved 137 schools with 97 schools for the control group. In the second experiment, groups were matched carefully, further reducing the "actual sample to 41 classes and 873 in each group" (Pitman & St. John, 1969, p. 167). Excessive publicity that had occurred during the first experiment was avoided in the second (Pitman & St. John, 1969, p. 166). Downing believed the second experiment was conducted in a properly controlled manner and that the findings would be free from charges of bias. Downing stated:

Where it has been difficult to equate the treatment or composition of the experimental and control groups in the two experiments the difference has tended to favour the control group (e.g. in the supply of books in both experiments) and as the superior attainments have generally been found in the experimental group, this suggests that the superiority of i.t.a. has tended to be underestimated in this research. (Pitman & St. John, 1969, p. 167).

The research findings supported the use of the initial teaching alphabet. Downing concluded the text with extensive recommendations for further research.

Also available are texts for self-instruction in the use of Pitman's initial teaching alphabet. Teach Yourself i.t.a. (O'Halloran, 1973) is a concise training manual. Although some linguistic explanations are included in each chapter, the main goal is presentation of a group of letters, of handwriting samples, and of practice exercises. This book is a text for learning to use i.t.a. and the author refers the reader to Alphabets and Reading (Pitman & St. John, 1969) for further detail on theory.

Another reference, The i.t.a. Handbook of Writing and Spelling (Mazurkiewicz & Tanyzer, 1965) is composed of detailed drawings for handwriting practice with i.t.a. characters. (See Figure 11.) It also includes explanations of i.t.a. spelling equivalents, and a dictionary of basic words in both i.t.a. and traditional orthography. The linguistic information is limited to brief notes provided by Sir James Pitman. This handbook, available from the i.t.a. Foundation, is an excellent tool for use when developing materials in i.t.a.

Further information about i.t.a. is available from the i.t.a. Foundation. (See Appendix B.) Pitman (1969) explained the need for the Foundation. In order to "place the use of i.t.a. in a public domain, so that publishers, printers, and everyone would be free to use i.t.a. without royalty, fees or any other restriction," some means had to be established to disseminate information.

A number of persons highly respected in public life and educational circles agreed to support me in the formulation of 'The Initial Teaching Alphabet Foundation' and to become its directors. With their backing and that of our Ministry of Education and London University Institute of Education, the Foundation was formed as a non-profit organization and was recognized by our Government as a tax-free charity. Under their ultimate control (notwithstanding my Chairmanship) there is the assurance that the selfless dedication of my grandfather to the cause of literacy is kept free of the taint of trading and profit. It was moreover to the Foundation that I transferred the residue of the copyright and the world right in the trademark in the appellation i.t.a., so that the

Figure 11 (removed due to copyright restrictions)

Selected Examples of Writing Instructions

(Mazurkiewicz & Tanyzer, 1965, pp. 2-10) 29

English-speaking world might be protected by the Foundation from the dangers both of Babelization of the learning medium and of passing off (as conforming to the common standard) of any variants — to the confusion of purchasers and users. This need for conformity to a common set of conventions is most important. T.O. has its conventions to which all school books conform, for the reason that conformity is so clearly in the interests of all (Pitman, 1969, p. 654).

In the United States, the Initial Teaching Alphabet Foundation is a corporation that was organized under the Membership Corporation Law of the State of New York in March, 1965. The Foundation was:

Formed exclusively for educational and charitable purposes; to promote, maintain and advance education in all its fields, and in particular (but without limiting the generality of the foregoing) by the development, standardization, propagation, dissemination, teaching and use of the Initial Teaching Alphabet ("Sounds and Letters . . .," not dated).

The i.t.a. Foundation distributes many pamphlets on request. The literature distributed by the Foundation seeks to answer those questions most often asked about the initial teaching alphabet. Sounds and Letters Don't Always Agree is a seven page publication, including a chart of i.t.a. usage. Questions and Answers About i.t.a. (1971) is a more technical pamphlet of 31 questions referring to details about spelling and transition as well as i.t.a. as a system. H. J. Tanyzer, Director of the Research Unit for i.t.a. at Hofstra, was interviewed for the Hofstra Review in 1966. What You Should Know About the Initial Teaching Alphabet is a reprint of that interview distributed by the i.t.a. Foundation. It includes general questions about i.t.a. as well as a chart of i.t.a. letters. A section on transition from i.t.a. to traditional orthography is featured in the article also. J. R. Block's i.t.a. Status Report — 1971 is available from the i.t.a. Foundation also. The report discussed accusations about "Hawthorne effect" interference and speculation about spelling regressions to i.t.a. after the transition to t.o. as well as including a review of the first ten years of i.t.a. in

use. The reported concluded with suggestions for further research as well as references for further reading.

The literature reviewed in this section is basically informational resource reading. Numerous research studies, available from standard library sources, exist in addition to these texts.

Characteristics of the Functionally Illiterate Adult

Although it was not possible to locate a definition of the characteristics and needs of the functionally illiterate adult that was both comprehensive and scientifically valid, it is possible to review the attempts made in several recent studies to compile the definition. In 1971, a project now known as the Adult Performance Level (APL) project was begun. The APL project was to "identify the basic requirements for functional daily adult living" (Swiss, 1976b, p. 264).

The APL approach was to define skills needed for living in the United States and to rate individuals as to their proficiency with those skills. The results did not provide a definition of the functionally illiterate adult as such. Coming out of the research and interviewing was the development of "general knowledge areas." Individuals were rated on achievement in each area by their level of attainment, that is, "adults who function with difficulty, functional adults, and proficient adults" Twenty-one million adults — one out of five American adults — fall in the lowest level "function with difficulty" (Swiss, 1976b, p. 264).

Heding et al. (1967) approached the problem of defining the functionally illiterate adult based on the results of extensive interviews conducted with educators of adults throughout the United States. They defined an adult as someone "fairly independent in operating as an individual" (p. 190) but also stated

that there is "no typical adult illiterate" (p. 143). Nevertheless, Heding et al. (1967) presented the outline they used as a guide when developing materials for the adult learners (p. 143).

Brown and Newman (1968) also set out to explore the population they sought to serve. Their findings are based on both literature surveys and research with a group of 207 individuals from the Buffalo and Niagara Falls, New York area (p. 5). The literature cites professional opinion to support their assumptions about the "city-core illiterate." "Lack of proper environmental stimulation" rather than lack of intelligence is seen as the major factor causing low achievement (p. 9). A second factor, family life as a pattern setting guide, is cited as often lacking in the city-core illiterate's background (p. 12). An unsatisfactory home situation can offer a double-edged problem for the adults. Not only are they unable to handle their own problems, but often they must also deal with the same frustrations mirrored by their children (p. 13). Analysis of the third factor, social environment as presented by Brown and Newman, is based mainly on professional citations regarding the effects of living in urban slum conditions (pp. 13-16). The adult city-core illiterate according to the survey by Brown and Newman, is further hampered by a lack of verbal language skills, the possession of which would better enable him or her to seek resources to help overcome problems (1968, p. 16).

The second facet of Brown and Newman's (1968) common characteristics profile is based on several standardized tests — the Wechsler Adult Intelligence Scale (WAIS) and the Davis-Ells Games (DEG) as well as Experience Inventory (EI) (p. 31). The Experience Inventory was originally developed by Don A. Brown and Norman D. Berke for use in Berke's doctoral study in 1967 (p. 32.) Results

of the Experience Inventory are thoroughly explained in the Brown and Newman (1968) report (pp. 42-68).

Generally, the subjects saw economics as the cause of their illiteracy. Either they were needed at home or they had to work. Together these reasons accounted for over half the total responses (p. 47).

Generalizations from the Experience Inventory statistics could begin a preliminary model of the "city-core illiterate" to be found in the Buffalo, New York area (Brown & Newman, 1968, pp. 42-49). The person would:

- be between 18 and 81 years old, an average age of 46.6
- have come originally from the South — 89%
- have been raised by parents — 79%
- have had parents with some reading ability — 78%
- see economic needs as cause of lack of reading skills
- live with a spouse who couldn't read — 68%
- be read aloud to: never — 48%; seldom — 28%; or much — 25%
- want to learn to read in order to get a better education — 43%
- to get a job — 30%; learn special skills — 28%; to be able to read newspapers — 20%; to read the Bible — 10%; or to read to his or her children — 6% (more than one choice was allowed on this last item)

A completely acceptable definition of the term "functionally illiterate adult" cannot be formulated at this time. Exactly what age constitutes "adulthood" and what grade-level attainment constitutes "literacy" are as yet unresolved (Brown & Newman, 1968; Cass, 1956; Greenleigh Associates, 1966; Harman, 1970; Jeffries, 1967).

For this thesis, the important factor is that the people consider themselves adults and that, although they have had some formal training in reading these adults have not attained the skills necessary to read.

Materials in Initial Teaching Alphabet for Remedial Reading Instruction

Before attempting to develop materials for teaching adults to read, a general survey of the available materials must be made. Extensive materials in

i.t.a. are available for teaching children to read for the first time. Reading programs for adults often utilize these children's materials. Materials designed for adults are not readily available. Appendix D has selected examples of certain materials.

The Missouri Adult Vocational-Literacy Materials comprise a three-level program of basic materials with teachers' guides. In this series, "Language for a Future" the materials for Levels 1-3 are printed with i.t.a. and t.o. on facing pages. The accompanying occupational stories are in t.o. and comprise levels 4-6 of the program. (See Figure 12.)

At this point, it must be noted that although the materials were tested by Heding et al., the n was very small. Three classes were held, one each with five, six, and seven learners. Statistical analysis of the field testing showed "significant gains" by the learners (Heding et al., 1967, p. 179). (See Figure 13.) The materials are not published at this time.

Brown and Newman (1968) used Level 1 and Level 2 of the Missouri "Language for a Future" materials in the Buffalo project. They reported that the pace of the Missouri materials was too fast for the learners in their experimental population. They added 212 pages of supplemental readings to correct the situation as it applied to their project (p. 167). The supplemental materials are not published at this time.

A new program, developed by the i.t.a. Foundation in Great Britain, became available for research studies in November, 1975. Introduced as a "Self-Instructional Reading Programme for Adult Illiterates," the materials for the program included a tutor's manual, scripts for the tutor to use when recording the cassette tapes for the student, and a student's workbook. The reading books

Figure 12

Lesson Plan Outline

"Language for a Future" Materials

(Heding et al., 1967, p. 5)

Level Number

6	t.o.	General mechanic	Nursing attendant	Automobile mechanic	Hotel and restaurant cook	Sewing machine operator	General salesperson	Waitress	Service station attendant	Machinist	Electrical appliance serviceman
5	t.o.										
4	t.o.										
Specific Occupational Booklets											
3	i.t.a. (transition)	t.o.									
2	i.t.a. (fluency)	t.o.									
1	i.t.a. (44 symbols)	t.o.									
Basic booklets											

Figure 13
Field Testing Data Summary as
Compiled by Heding et al.

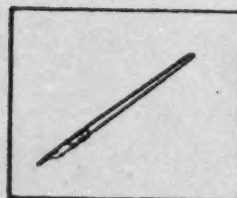
<u>Class Location</u>	<u>Class Size</u>	<u>Hours of Instruction</u>	<u>Statistically Significant Gains Indicated</u>
Moberly	7	75 Hours	Word study skills Word meaning Spelling Paragraph meaning
Columbia	6	25 hours	Word study skills Paragraph meaning
Jefferson City	5	75 hours	None

used in conjunction with the program are a British series, the Clearway Readers, developed by Stuart Bell and published by Pitman. The readers are graduated so that each one only includes words composed of letters which have been introduced before. As knowledge of more symbols is attained, the student progresses to the next reader.

The program has been designed so that it may be used by tutors who are not professional educators as well as by trained teachers. Scripts are provided instead of prerecorded tapes. The scripts allow for the cassettes to be recorded by the tutor whose speech might be more close to that of the student than if the tapes were prepared in one specific region to be used everywhere. The learner can then use the tapes and proceed as with any programmed instructional series. The program was to be tested during 1976 and published results are unavailable at this time. Comments on use of the series in the United States centered on the typically British character of some of the workbook figures which might make them difficult for the American to recognize. Although the concept of the system was praised, the unfamiliarity of both the story factors in the Clearway Readers and some of the sketches in the workbook were seen to be a possible stumbling block (Harris, 1976). (See Figure 14.) Using the program with slight modifications in the workbook and with a different set of readers could allow for use of these materials in the United States.

Materials in i.t.a. specifically for use with adults are available commercially on a very limited basis only. (See Appendix C.) The "Breakthrough" program for reading, developed by Richard Fink, assistant to the Superintendent, Public Schools, Orange, New Jersey, and Rose Clavering, manager of programmed instruction projects, American Management Association, Inc., was structured for

Figure 14
Selected Examples from the i.t.a.
Foundation Experimental Materials



the adult learner. Formerly published by Initial Teaching Alphabet Publications, Inc., it is out of print as of this writing. "Breakthrough" was a two-phase program following the writing and spelling conventions set out by Pitman. Phase I dealt with basic skills. The materials included 112 worksheets and four preliminary tests, key word picture cards, and paragraphs for reading practice. The materials were accompanied by teacher's manuals for both the worksheets and the paragraphs.

Phase II of "Breakthrough" continued as an extension of basic skills. A teacher's manual and 50 worksheets were included in this phase along with five 6" x 9" booklets for reading practice. Two books contained parts of famous stories transliterated into i.t.a., such as Jack London's "Call of the Wild," Washington Irving's "Rip Van Winkle," and Edgar Allen Poe's "Tell-Tale Heart." The other three were collections of brief essays on topics of interest to adults. The titles were "You and Your Money," "The World of Work," and "The Job You Want."

There are some remedial materials useful for adults as well as for the children and adolescents they were designed to help. Sturgis distributes a film about i.t.a. usage and publishes the "Freedom to Read" series developed by Marvin G. Baker. (See Appendix C.) Although developed as a remedial program for children and adolescents, the materials are not particularly age oriented. The series was tested at the Reading Clinic at Indiana Central College in 1964 and 1965 and was published in 1966. The program materials include audio-magnetic tapes, sound symbol cards, vocabulary pictograph flash cards, worksheet masters and booklets of stories, accompanied by a teacher's manual. The audio-magnetic tapes are for teaching the sounds of the characters. The

spirit duplicator masters introduce writing of the i.t.a. symbols (44 sheets) and provide reading practice with "Reading Activity" sheets (8 selections). It should be noted that Baker does not follow all the graphic representation guidelines for retained symbols as set out by Pitman and demonstrated by Downing (1962, pp. 28-31). (See Appendix D.) Certain characters are formed conventionally whereas Pitman had introduced minor modifications. The booklets in the series are about 5" x 8" and deal with such topics as "Job Hunting," "Wheels," "Race Cars," "Atoms," "Water Adventure," and "Hunting Without Guns." The worksheets and the booklets are written entirely in i.t.a.

The Educational Research Council of America publishes a series of i.t.a. materials for teaching reading on the elementary level. (See Appendix C.) The supplemental materials for the series include some items that can be used with adults. Among those are two sets of transition wall charts. One set of 28 charts is of transition elements, both i.t.a. and t.o. equivalents. The other set of 95 charts is transition elements, highlighted in color lists of common words. A third set of materials consists of 13 readers that are stories about explorers and discoverers. The stories feature such people as Columbus, John Glenn, Admiral Byrd, Jacques Cousteau, and others.

Research Projects Using the Initial Teaching Alphabet for Remedial Instruction

The problems of teaching a person to read for the first time are different than those of teaching a person to read who has tried and has not been successful. The functionally illiterate adult has to contend with the inhibitions growing out of past failures (Stevenson, 1973, p. 39). One of the most recent books among those discussing the psychological and sociological characteristics

of these learners is Toward a Literate Society, (Carroll & Chall, 1975). The book is a compilation of papers developed by a committee of seven prominent educators who were appointed by the National Academy of Education to address the implications of a national effort to achieve universal literacy.

The system of i.t.a. is likely to be new to the functionally illiterate adult. It is not usually the same system at which he or she failed. Weber (1975) cited this remembered failure as a possible reason adults reject available traditional adult basic education (ABE) programs (p. 155). The fresh appeal of i.t.a. may be a factor of reducing the interference caused by those memories of failure. The medium, i.t.a., at first glance is a system that looks different. The unfamiliar augmentations cause the i.t.a. symbols to seem unusual although they also seem familiar because they have a basis in traditional orthography (Pitman & St. John, 1969, p. 117).

The learner can see that i.t.a. is different than the system at which he or she failed (Pitman, 1973, p. 40). The instructor knows that i.t.a. is not a complex system because it is based on phonemic correspondences. The research discussed in the following material deals with the instruction of adults learning to read with i.t.a. after failing to learn with traditional orthography.

The reviews will be presented in the following order. The major studies in public or university settings as conducted by Heding et al. (1967) and Brown and Newman (1968) will be detailed first. Then the reports by Clark (1966), Patten and Clark (1968), Hannenberg (1966 & 1968) will be presented. The next category is research about the use of i.t.a. for adult remedial reading lessons that has been conducted in army training schools and prisons. The army research is based on i.t.a. work in the British Army's School of Preliminary Education. The prison

research has been conducted both in Great Britian and in the United States. In the United States, programs were at San Quentin, California; Salem, Oregon; Nashville, Tennessee; and Ashland, Kentucky.

General Studies. Research has been conducted with illiterate persons in remedial and vocational programs. Heding et al. (1967), began with a working conference in the fall of 1965 which led to the Missouri Adult Vocational Literacy Materials Development project (p. 146).

Extensive research in determining the needs of the functionally illiterate adult was conducted at the University of Missouri for this study. Funded by the U. S. Office of Education, the project set out to develop a program for the functionally illiterate adult by reviewing available literature about the potential reading students, by consulting with authorities in the field, by interviewing teachers experienced in teaching adults, by interviewing adult learners in both basic and functional literacy classes and, finally, by distributing a questionnaire to gather opinions from teachers and directors of adult basic literacy programs throughout the United States.

The stated purpose of the project was "to carry on essential research to enable development of basic and intermediate reading, writing, and spelling materials" suited to adults (p. 2). The materials development phase of the project was to yield "a single paper-bound workbook-textbook of approximately 175 pages which would incorporate instructional materials in reading, writing, and spelling beginning with lessons for the nonreader and proceeding through three levels or grades of reading instructional material" (p. 2).

Heding et al. pursued i.t.a. as an "innovative" way to interest the adult learner. They believed that the medium of i.t.a. combined with adult oriented

materials would provide opportunity for growth in reading skills (p. 169). The materials they developed were called the "Language for a Future" series (p. 212). The materials consisted of six instructional booklets and nine supplemental vocational booklets (p. 169). The lessons are printed in facing pages of i.t.a. and t.o. in the first three levels of the program, thus exposing the learner to both systems until transition is completed.

Pretesting and posttesting of the field study learners with objective measures was supplemented by anecdotal records kept by the three teachers involved (p. 178). Three classes were formed. The results are given in Figure 13.

It should be carefully noted that the n of each class in the field testing was very small. In fact, Heding et al. (1967) suggested in their summary and evaluation that a larger sample should be included for further experimental classes (p. 207). Additional comments about the materials included the following recommendation:

... in view of the limited evaluation of the materials which has been conducted so far, that the materials be considered experimental in character and that further try-out and evaluation be made utilizing the materials in classes taught by teachers of all levels of preparation. It is hypothesized that the materials will be most effective when used by trained teachers who are prepared in the use of the initial teaching alphabet and in the teaching of reading (p.213).

Brown and Newman (1968) conducted a project in the Buffalo, New York area under a grant from the Office of Education to investigate a "Literacy Program for Adult City-Core Illiterates" (p. 3). The project set out to do three things: first, define the common characteristics of the learners; second, to test the efficacy of a program based on four parts — i.t.a. as the medium, adult oriented materials as the subject matter, an instructional pace geared to the adults' need, and teachers trained to work with adults as the instructors; and

third, to begin to formulate a model for prediction of reading success (p. 4). The population for the study included people of different ages.

In the part of the research dealing with reading instruction, the study set out to have an experimental and a control group of 60 learners each (p. 6). "Intermittent attendance and dropouts from the program found only 27 finishing at the end of the year, however" (p. 6). The "experimental population" was tested with the Stanford Achievement Tests (SAT) at the beginning of the 200-hour instructional program. In the middle and at the end of the program, SAT subtests were administered. The groups were tested for significance at the .01 level of confidence. The subjective reactions of learners and instructors were tabulated but not subjected to statistical analysis (p. 6).

The materials used by the experimental group included Levels 1 and 2 of the "Language for a Future" materials developed as part of the Missouri Adult Vocational Literacy Materials Development Project (Heding et al., 1967), as well as 212 pages of material developed during the course of Brown and Newman's (1968) research (p. 167).

The conclusions were twofold. First, statistically, there was no significant difference between the gain score made of the control group and the gain score of the i.t.a. group. Second, subjectively, there were differences. The difference:

...most striking to the research staff, who observed classes both years, was the change in attitude of the experimental sample. The opportunity the i.t.a. afforded to read higher-concept material at an earlier level seemed a factor in the heightened interest (p. 74).

Out of 58 learners, 57 expressed positive feelings about using i.t.a. They "felt the program had been extremely valuable" and several expressed strong support for both the materials and the instruction (p. 75). Many of the learners

preferred i.t.a. "making the comment that it was easier to understand words or to analyze them in the i.t.a." (p. 76).

Other studies were conducted in the mid 1960's. One such project was conducted as an eight week program at the university of Detroit in 1965. The program employed both i.t.a. and t.o. in its reading program for 53 men (Clark, 1966, p. 226). Descriptions are given of the methods used to test the men and the methods of teaching (pp. 226-227). The report concluded with reference to the "final report" to be published when the research has been thoroughly evaluated. That report was then published by Patten and Clark in 1968. Patten and Clark had reestablished contact with 35 of the 45 men in 1966, six months after the University of Detroit project (p. 32). Of these, 21 "were continuing literacy training under publicly sponsored programs after completing their training at the University of Detroit" (p. 38). They reported the results with the 45 men who participated in the program from the pretesting to the posttesting (p. 29).

The i.t.a. medium facilitated the teaching of reading to adults with instructional levels between 0.0 and 4.0. On the other hand, the t.o. medium tended to satisfy the reading needs of adults with instructional reading levels of 4.0 and above (p. 30).

Hannenber (1966) discussed the "Umbrella Program" in Brooklyn, N. Y., sponsored by the Department of Labor under the Manpower Development Training Program (p. 204). Admission to the program was granted to those school dropouts "seventeen years and up." They were divided into two groups, "the youthful adults from seventeen to twenty-one and the adults from twenty-one up" (p. 205). In addition to vocational training and remedial scholastic training, the program offered a guidance service (p. 204). Hannenber stressed the

importance of access to counseling for the students. She related the benefits as a peace keeping feature for the school (p. 205). She continued with a thorough explanation of the program from introduction of symbols to explanation of consonant blends and on to reading (p. 206).

Among the innovations in the Brooklyn program was the introduction of a "small, light dot to separate the word parts" when teaching "syllabification" (p. 207). Using it provided "a much greater degree of early success than [Hannenber] had imagined" (p. 207). An example of this technique would be the word "hos-pi-tal."

Further results of the program and several brief case study reports complete the article. Hannenberg stated that "the Pitman i.t.a. reading program has become an integral part" of the total program to be used until sufficient reading skill has been attained. At that point, "students are then transferred to SRA" (p. 212).

Hannenberg, then Supervisor of Basic Education, Manpower Development Training (MDT) program, New York City Board of Education, discussed the program and curriculum used in the program.

The use of the Pitman Initial Teaching Alphabet is a distinctive feature of [the] remedial reading program. This alphabet which cannot teach reading by itself is nonetheless an invaluable asset. It helps to minimize the complexity of English spelling long enough for the effects of remediation to be felt (1968, p. 2).

This is an important feature of the initial teaching alphabet. The simplification of the system allows the student to experience success and that success can act as a stimulus for further work. Hannenberg reported one case study where the success factor worked in reverse (1966, p. 211). According to Hannenberg, the man had based his life pattern on his inability to read; his failure was the basis of

his self-concept. As soon as he began to read successfully, he dropped out of the program. At the time the report was written, the man had re-enrolled but there was no further detail reported (p. 211).

In 1968, Hannenberg spoke at the Fifth International i.t.a. Conference. She reported then on three years experience with the program using i.t.a. She detailed the development of materials (p. 2). The need to understand the psychological requirements of the functionally illiterate dictates the reconsideration of "the suitability of methods and materials" currently used (p. 3). She suggested the use of "human interest stories" and the teaching of various fields as they relate to the everyday life of people (pp. 6-7). An example given was teaching about economics as relates to a family budget instead of economics taught by charts and graphs (p. 6).

Hannenberg discussed writing and the freedom of expression evidence when i.t.a. is the medium used (p. 8). She concluded that "it is incumbent upon those of us who have received this generous gift [of i.t.a.] to provide teaching materials and teaching methods worthy of it" (p. 8).

The reports by Heding et al., Brown and Newman, and Patten and Clark dealt with specific projects while Hannenberg's dealt with a continuing program. In all the projects, i.t.a. was considered a beneficial component.

Military Institutions. The Royal Army Education Corps runs a school at Corsham, Wiltshire, England. None of the Army reports cited here are technical research papers. The findings which are favorable to the use of i.t.a., are reported in general terms. The school where the training programs are conducted is called the School of Preliminary Education (Duxbury, 1965). Its

student body is about "10% of the overall Army intake," that is, those men whose "reading age is less than 11 years" when they enter the Army (Stevenson, 1968). The i.t.a. program, begun with a trial group at the instigation of Sir James Pitman, was so successful that by 1965, it was used as the "standard approach" in remedial classes at the school for those "with a reading age of eight years or less" (Duxbury, 1965). "Reading age" is a term used to discuss level of attainment of reading skills. A reading age of "eight years or less" in Great Britain would be equal approximately to a grade-level placement of 3.0 in the United States. Duxbury viewed the use of i.t.a. with students whose reading level was higher than 8.0 years as an "imposition" due to their level of acclimation to t.o. forms.

The program is individualized with no "set of syllabuses or standardized lessons" (Stevenson, 1973, p. 43). After using i.t.a., the administrators at the school concluded that although i.t.a. was no "panacea," it served the needs of those least educated men who previously had been unsuccessful in learning to read in traditional orthography (Stevenson, 1967, p. 15).

The materials used at the Army School of Preliminary Education had been prepared for children. The school staff expected resistance due to content rejection. Stevenson reported that it was not the enjoyment of content per se but the enjoyment of actually reading that proved important to the men (1968, p. 2). Stevenson said the men found the stories amusing. Their i.t.a. reading was their first exposure to children's stories such as "Snow White" or "The Ugly Duckling". "Goldilocks and the Three Bears" is "frequently considered to be a rather funny and sexy story" (Stevenson, 1973, p. 41).

The inability to express their feelings in writing was a major problem for the men (Stevenson, 1973, p. 42). The introduction of a typewriter appears to have made a significant difference in the men's abilities to communicate in writing. The typewriters had characters in i.t.a. and were loaned to the program by the IBM Corporation in 1966. Stevenson called the effect "startling" (Stevenson, 1973, p. 42). The mean improvement in Reading Age over a ten-week period had risen from "26 months to 41 months since the typewriters became an integral part of the program" (Stevenson, 1968, p. 4). On a subjective level, Stevenson believed that the use of the typewriter gave the men "tremendous confidence" (Stevenson, 1967, p.8).

The mean reading gain, after two years, for a group of 134 students using i.t.a. was 26 months. The gain for the t.o. control group was only six months. The overall mean for the whole school was 15 months during that time (Stevenson, 1973, p. 42). The continuing result of the research is that i.t.a. is used as the medium, with whatever method and materials the individual teacher chooses, for those Army personnel at the School of Preliminary Education with a reading level below eight years.

Corrective Institutions. In the prison research, a variety of programs exists. The prison at Stafford, England conducted a program, said to be the only prison education program using i.t.a. in Great Britain. The program has an i.t.a. group and a t.o. control group. It is funded by a grant from the Adult Literacy Resource Agency and was arranged with help from the i.t.a. Foundation. ("Such a Tiny Revolution," 1976). In this class, prisoners use i.t.a. as the medium, writing about themselves and their lives in addition to learning reading skills.

Several programs in prisons exist in the United States. At San Quentin, an inmate who had taught reading using i.t.a. before his conviction introduced the medium there. The small test group's success led to further use of i.t.a. by the teaching staff itself. The materials used were the Downing Readers and the i.t.a. Early-to-Read series (Hastings, 1964).

The i.t.a. Foundation has reprints of three articles about i.t.a. usage at the Oregon State Penitentiary in Salem, Oregon (Kenndy, 1965; Pahrman, 1966; Pahrman, 1967). W. F. Kenndy, Director of Education, reported that "in an effort to improve" the remedial program at the institution, the Education Department began using i.t.a. (Kenndy, 1965). The new inmates were tested with the Metropolitan Achievement Tests at their "appropriate levels" during their first week. Those who score less than fifth grade are sent to compulsory education classes. In this i.t.a. experiment, the groups were small, 37 in the i.t.a. group and 19 in the t.o. control group. The results were 2.8 grades advancement in the i.t.a. group and 1.2 grades in the t.o. group, as determined by the Stanford Achievement Tests, Elementary Battery. Kenndy stated that the education administrators at the Oregon State Penitentiary "are very pleased with i.t.a. and highly recommend it to others who are interested in teaching reading to adult illiterates" (p. 12).

The other reports from the same institution are by William H. Pahrman, Supervisor of Elementary Education at the Penitentiary. Pahrman (1966) listed the various measures used to test the inmates. The comments were based on groups of 65 men using i.t.a. and 158 using t.o. Class size was between two to four inmates. Pahrman reported that the average time to achieve fifth grade status, was 4.35 months with i.t.a. as compared to 6.55 months with t.o. (p. 2).

Pahrman included 12 case study reports (pp. 2-5). He recommended that other educators try i.t.a. "There is no doubt in our minds as to the value of i.t.a. as a successful method in the teaching of adult illiterates" (p. 5).

Pahrman (1967) described the program used for i.t.a. instruction at the Oregon State Penitentiary (p. 4). He detailed the i.t.a. Early-to-Read series (p. 5). Pahrman explained the concept of experience stories and development of a class dictionary (pp. 5-6). He saw the "lack of phonetic perfection" in i.t.a. as a "compromise" to transition, and a "strength" of the system (p. 6). The treatment of spelling problems is discussed by Pahrman who concluded with the reminder that:

i.t.a. is not a new way to teach reading but a teaching tool to make the initial stages of learning to read easier, simpler, and less confusing for the beginner than our old traditional spelling (p. 7).

This article would prove an excellent supplement to an individual planning a program for teaching reading to adults using i.t.a.

In Ashland, Kentucky, at the Federal Youth Center, the i.t.a. "Breakthrough" program was used for reading instruction (Reams, 1972, p. 2). The class was composed of 13 students scoring below 4.0 on the Sanford Achievement Tests (p. 5). Students were encouraged to participate in making supplementary materials (p. 5). Discussion groups and teacher conferences were seen as indirect speech classes that helped improve speech problems (p. 6). After transition, the students were taught dictionary skills.

An extensive reporting of the use of i.t.a. is presented by Sollie (1966). The use of i.t.a. with adult basic education was the subject of his doctoral dissertation. Before reporting on his own research, Sollie reviewed the history of i.t.a. and the original experiments conducted with i.t.a. in both Great Britain and

the United States — 1961 at Oldham and 1963 at Bethlehem, Pennsylvania, respectively (pp. 27-35). Reviews of funding sources for adult education programs, such as the Vocational Educational Act of 1963, the Library Service Act and the Adult Basic Education Act are included (p. 40). Sollie cited the example of Sequoyah and the Syllabary he developed for the Cherokee language as a comparison to Pitman's alphabet (p. 19). Sollie attributed Laubach's "each one teach one" approach to following Sequoyah's example as the Cherokee scholar had required each adult who learned to read to teach one other person (p. 20).

Sollie's research was conducted at the Tennessee State Prison at Nashville, Tennessee. The group was divided into two classes. The women's class began with ten and ended with eight subjects (p. 47). The men's class began with 22 and ended with 14 subjects (p. 99). They were given a total of 90 hours instruction, the men in two-hour sessions, three times a week and the women in three-hour sessions, two times a week (P. 49).

The materials used in this study were the I.t.a. Early-to-Read series, developed by Mazurkiewicz and Tanyzer (pp. 50-51). The full program was followed and Sollie discussed the techniques (pp. 51-62). He stated that the children's materials were well received and "the object of humorous remarks and laughter" (p. 102). He reported that the subjects found the children's fantasy stories more interesting than everyday details (p. 125).

After lengthy qualifying statements (pp. 108-112) as to the lack of a control group taught in t.o. as well as the fact that the study was exploratory, not truly experimental, Sollie concluded that "the data support the hypothesis that functionally illiterate adults of a prison population do indeed make significant

gains in reading grade level, significant beyond the .001 level of confidence, when they are instructed in reading by the Initial Teaching Alphabet method" (pp. 112-113).

All the research cited in this chapter was not strictly experimental in terms of numbers of subjects, control groups, and statistical analysis. Nonetheless, the conclusions of the studies affirm that the use of i.t.a. was a benefit.

CHAPTER III

Materials Development Design

Instructional Model

Although there exists academic interest in employing l.t.a. for reading instruction with adults as well as a small body of encouraging research, the scarcity of materials inhibits further exploration of the problem and further program development. It is the intent of this project to develop materials in Pitman's initial teaching alphabet that are specifically aimed at the needs of the functionally illiterate adult. It is proposed that the use of these materials will aid the functionally illiterate adult in attaining prereading and basic reading skills. To guide the development of the instructional procedure, a modest review of research in curriculum planning was conducted. Two approaches are reviewed as follows.

Tyler (cited in Saylor and Alexander, 1974, p. 159) suggested answering four basic questions to provide the basis for materials development. Those questions are:

1. What instructional objectives, operationally stated, will best promote the attainment of functional literacy skills?
2. What preassessment evaluation can be used to determine the student's current level of literacy skills?
3. What learning activities would best promote the attainment of functional literacy skills?

4. What is the best means of evaluating the progress of the learner in attaining functional literacy skills?

The "instruction model" presented by Popham and Baker (1970) stressed the need for "planning and assessment" in materials development (p. 13). The procedure outlined by Popham and Baker is:

1. The objectives of instruction are specified in terms of learning behavior.
2. The student is preassessed as to his current status with respect to those instructional objectives.
3. Instructional activities that should bring about the intended objectives are designed.
4. The student's attainment of the objects is evaluated.

In expanding on the model, Popham and Baker explained that the teacher must decide at the outset what level of attainment is expected for the student at the end of the unit of instruction, that is, the "learner post instructional behavior" (p. 14.). The second step, "preassessment" is so termed to include a variety of determinants in addition to the option of standardized written tests. The accomplishment level determination established by preassessment enables the teacher to formulate materials suited to the actual level of the student, that is, being neither too simple nor too advanced. This step identifies the "learner's entry behavior" p 14). The third step is instructional design and implementation. The instructional materials developed must include "opportunities for the learner to practice the behavior called for the instruction objective," that is, the principle of "appropriate paractice" (p. 15). In this stage, the teacher must "analyze the tasks the learner must master and provide instructional situations that should accomplish the learning of those tasks" (p. 160). The fourth step in Popham and Baker's instructional model is evaluation. The teacher must review

the results to see if the instruction given produced the results desired. "Objectives and evaluation should, in essence, be identical; that is, test items should be drawn from the class of behavior specified in the objectives (p. 16). The evaluation allows the teacher to delineate the factors of the student's "past instructional performance" (p. 17). That determination serves as the basis for assessing the successes (or failures) of the instructional program.

Implementation of Model

The method of materials development in this project followed the suggestions previously noted. An outline of the objectives operationally stated has been prepared. These statements facilitated the development of the materials in i.t.a. to develop the prereading and basic reading skills for the functionally illiterate adult learner. Prereading skills involved conceptual reading problems, such as direction (left to right), words (that letters compose words), sentences (words compose sentences), and the existence of punctuation. Basic reading skills involved practical reading problems such as alphabet recognition and sounding out words.

The second stage, that of preassessment evaluation, was conducted by means of a case study. The subject was given both objective and nonobjective measures. The objective measures used were standardized diagnostic tests. On the nonobjective level, the subject of the case study was interviewed to determine facts about his background (i.e., family, school, health, etc.). The data collected from the objective measures and the interviews was compiled to aid in developing materials.

The third stage was that of materials design and preparation. In this phase, the materials were developed based on learning activities relevant to the needs of the functionally illiterate adult who is interested in developing prereading and basic reading skills. (See Figure 15.)

The goal of the materials development project is to develop materials that will help increase the reading ability of the functionally illiterate adult by means of skill development in prereading and basic reading. The goal of the project must be a continual focal point for the investigator. Popham and Baker (1970) stressed the need to involve the "learner" in the pursuit of the goal (chap. 6). They believed that the instructor must communicate to the learner exactly what is expected of him or her, that being the first principle to follow in setting up an instructional sequence" (p. 78). Although this exposes the teacher to the "risk of having the students study only what [the teacher] considers important," Popham and Baker concluded that the "possibility is far less dangerous than the risks associated with the customary study of irrelevancies" (p. 79). The learner must understand these goals (p. 80). After communicating the goals and confirming the student's understanding of the goals, the teacher must apply the principle of "appropriate practice." "Appropriate practice" is giving the learner opportunities during the instructional sequence to "behave" the way the operationally stated goals say he will behave at the end of the program (p. 82). This is often accomplished by means of "equivalent practice" (p. 83) or "analogous practice" (p. 84). These practice forms enable the learner to "test" himself before the final, formal evaluation.

Feedback is the factor throughout the instructional procedure that allows the learner to adjust his efforts to suit his needs in pursuing the stated goals.

Figure 15**Materials Development Guidelines as****Compiled by Heding et al.****(Heding et al., 1967, p. 146)**

1. Teachers should operate with rules they understand rather than just looking up i.t.a. characters for words. They need to be able to think from "sound" to "word."
2. Double consonants should be retained provided the character is a simple one.
3. Adults will need a good deal of "ear training" or auditory discrimination work.
4. Consonants are more stable and probably should be used before vowels.
5. A small sight vocabulary should be built first before introducing the individual symbols.
6. There is no particular order for the introduction of symbols. Symbols introduced first could be ones that appear most frequently in the early stories to insure sufficient exposure to the symbols.
7. Because of visual problems, similar looking symbols should not be introduced together.
8. Fewer repetitions per word should be needed for adults.
9. The facing page idea is favorable because adults will know clearly when they are dealing with t.o. and when they are dealing with i.t.a.
10. It is important to keep students in i.t.a. for a sufficient length of time to allow for transfer to t.o. The facing page arrangement will allow transfer to occur whenever student is ready.
11. Fluency in reading i.t.a. is most important in transferring to t.o.

Popham and Baker (1970) called this "knowledge of results" (p. 85). They recommended that knowledge of results be given "within an hour...but preferably immediately" (p. 85) to benefit the learner in the highest degree possible.

Case Study as Evaluation Medium

The success or failure of the unit of instruction was assessed in the fourth stage, that of evaluation of the materials developed. Formative evaluation throughout the instructional unit implementation period allowed for reassessment of direction while the lessons proceeded. Direct communication from the student to the teacher formed the basis for continual modification of the lessons as instruction progressed. The formative evaluation in this period was based on feedback from a case study field test.

A profile of the individual who participated in the case study included the following characteristics: The individual had attempted to read in t.o. and had failed. The individual considered himself an adult, was gainfully employed and was married.

The format of the tutorial sessions was based on research by Tinkle (1973). He stated that for a 20-hour project, period of "massed instruction" of four consecutive hours per day produced a 1.6 grade level improvement. His research with functionally illiterate adults employed traditional orthography; nonetheless, his findings were used to structure the tutorial sessions on a "massed instruction" basis. Heding et al., (1967) further supported this choice of massed instruction by the findings in the teacher survey that "the most prevalent length of class period on survey was from two to three hours as reported by 63 (of the 68) respondents" (p. 162).

This program was structured to allow 20 hours of reading instruction, two hours per session, and two hours of interviewing and testing. Before the beginning of instruction, a thorough interview was conducted to gather facts about the subject, his family background, his school experience, and his job experiences. With the subject's permission, the interview was recorded on audio-magnetic tape. The Gray Oral Reading Test was used for the pretest. A different form of the same diagnostic test was used for posttesting. The testing data were supplemented by another interview with the student and by review comments from the instructor.

The case study provided necessary information that the researcher needed for formative evaluation. The formative evaluation was based both on the feedback from the learner and on the observations of the research. Changes in the materials during use of the instructional unit were made as the need for revision was indicated.

Summative evaluation is a term which can be applied only loosely to a materials development project which has not been tested thoroughly in the field. No major conclusion or meaningful statistics can be developed. An answer to that difficulty will be the inclusion of a preliminary model for a full summative evaluation project.

The procedures reviewed above form the basis of the materials development phase of the project. The materials developed were an introductory set of alphabet character cards, booklets of vowel/consonant combinations, booklets of consonant/ vowel/consonant combinations, vocabulary booklets, flash card sets that can be used first to make simple phrases and later simple sentences, sentence reading cards, and, finally, paragraphs.

The characters introduced in the first set of alphabet cards formed the basis for the first set of vowel/consonant combination cards. The vowel and consonant combinations continued to expand in successive short booklets as more characters were introduced.

The words in the vocabulary booklets were those found in Dolch's list of the 220 most common English words (Dolch, 1948, p. 105). These words were used as the basis of the flash card set for building simple phrases. Then the same words were used in the sentence readings in addition to occupation related words that were not found in the Dolch 220 but were familiar to the individual participating in the case study.

The paragraphs were designed to further stimulate interest in reading. The paragraphs were written after review of the content guidelines for materials development delineated by Heding et al. (1967) and presented in Figure 16.

Figure 16
Content Guidelines for Materials Development
as Compiled by Heding et al.
(Heding et al., 1967, p. 145)

1. Have some reference to rural setting.
2. Be multi-ethnic and contain no stereotypes.
3. Be about real life situations rather than fictitious but should not be depressingly realistic.
4. Show concern for family relations since most adult illiterates want to help their children.
5. Possess variety since adult illiterates are interested in reading about everything.
6. Be about topics of interest to adults in general although students did not object to learning from children's books since little else was available.
7. Contain some socially significant topics, such as a knowledge of laws which affect the student.
8. Have a strong father image.
9. Contain topics which would be interesting to women since a large number of women are in the classes.
10. Inform the adult illiterate how to avoid being duped.
11. Help the adult illiterate learn to manage his finances.
12. Probably be built around a neighborhood setting with a number of families involved.
13. Provide the starting point for class discussion.
14. Be contained in a series of smaller books rather than one large book to allow students a feeling of accomplishment.

CHAPTER IV

Materials Development and Evaluation

Preassessment of Skills to Be Taught

Popham and Baker's model was the guide for the materials development work presented here (1970, p. 13). The first step is the determination of what skills the learner will have attained after participating in the unit of instruction. Operationally stated, it is expected that after 20 hours of instruction, the learner will:

- know the sound associated with each i.t.a. character
- be able to form one syllable words by combining characters
- be aware of word attack skills for use in reading multi-syllable words
- be aware of basic punctuation (i.e., comma, period, question mark, and exclamation point)
- be aware of basic reading units (e.g., sentence, paragraph)
- be able to read the 220 words found on the Dolch Basic Word List when they are written in i.t.a.

Preassessment of Learner's Needs

The model proceeds to preassessment of the learner's needs. To begin preassessment, a preliminary interview was given to the subject to see if he would fit the definition of a functionally illiterate adult. He said he had attended school until sixth grade and he said he couldn't read. Having established that the subject met the initial criteria, a more extensive interview followed. For the purposes of this thesis, the subject will be called Alan.

During the interview, the following history was established. Alan was the seventh of nine children. He did not speak intelligibly until the fourth grade. His birth date (December 25) put him right at the school enrollment cutoff. He began first grade at five, in the same class as his next older brother. This sibling served as a translator of sorts for Alan's "jabber" as he called it. Reading lessons in school included sequential oral reading and the first grade teacher skipped over Alan at his turn. Both second and third grade experiences were the same. Alan reported that at no time was he given any remedial work in speech or in reading. In fourth grade, he began to speak and was expected to read when his turn came. He couldn't and sat out the reading and all other work. Alan explained that he was "just one of the fixtures."

The fifth grade was a turning point for him. Previously, he had played with the children despite his lack of scholastic skills. That same lack now made him the brunt of jokes. By sixth grade, he was unable to tolerate the ridicule, responding with repeated incidents of violent behavior. The school responded in turn by having him suspended and placed in Juvenile Detention. According to Alan, at no time during the five and half years he spent in an elementary school in Clayton County, Georgia, did he receive any remedial help.

His first encounter with remedial work was during his third stay in Juvenile Detention. By this time, he was almost 16 years old and anxious to get his driver's license. A male instructor at the Detention Center taught Alan to recognize certain words so that he could sight read his way through the driver's license examination. Alan credits this man with helping him become a more responsible individual. Alan said, "He straightened me out; he's more or less a friend and a teacher . . . I got a job and I been working ever since."

Although the interview with Alan left little expectation for any reading ability, supplementary objective measures seemed appropriate research procedure. The low level of achievement reported by Alan suggested a very basic evaluation to start. Two sets of alphabet cards (flash card type, one letter per card) were prepared, one in upper case and one in lower case. Alan was asked to say the name of each letter as it was shown to him, first in upper case, then in lower. He knew all the names. Then he was asked to make the sound associated with each letter as he saw it, first upper case then lower. He was able to identify the sound of 12 letters in both upper and lower case; five in upper case, but not lower; and one in lower case, but not upper. There were eight letters he never identified with any sound. (See Figure 17.)

After completion of the first evaluation, the researcher was reluctant to proceed with both of the standardized measures chosen previously. The Gray Oral Reading Test (Gray, 1963) and the Gates-MacGinitie Survey D (Grade 4/5) (Gates & MacGinitie, 1965) had been selected. The Gray Oral had been used with adults before (Torrence, cited in Heding, 1967, p. 50).

Too much formal testing seemed unwise leading to the compromise solution of administration of one of the two remaining measures. The Gray Oral Reading Test, Form A, was administered to Alan as a standardized pretest. The results were plotted on the boy's scale for grade-level placement. The assigned level was 1.7.

The level of placement of an adult based on a measure normed for children is at best arbitrary. For the purposes of this materials development project, however, the exact level placement was not critical as long as it appeared to be lower than fourth grade. Patten and Clark (1968, p. 30) reported the best results

Figure 17
Results of Letter/Sound Association Measure
as Administered to Case Study Subject

LETTER/SOUND ASSOCIATION

<u>Upper and Lower Case</u>	<u>Upper Case Only</u>	<u>Lower Case Only</u>	<u>Association Never Made</u>
ABD	CFY	H	GIO
EJK	ZL		NQR
MPT			SX
UVW			

with i.t.a. were with those learners beginning below the fourth grade level. Heding et al. (1967) stated that "i.t.a. could be used successfully with adults but with greater success if the adults had a tested reading level between zero and grade level three" (p. 147). Alan's test results enabled him to become the subject of the case study.

Instructional Activities Design

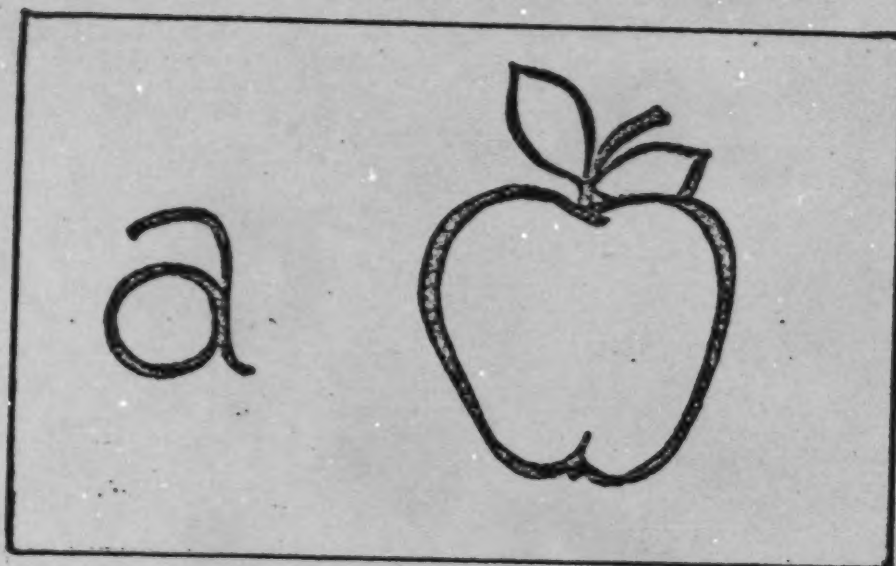
The third step, that of designing instructional activities, was begun after the unit goals were stated and the learner preassessment was completed. Consideration was given to the guidelines developed by Heding et al. (1967) as outlined in Figures 15 and 16.

The materials developed fell into nine categories, those of character recognition, vowel and consonant sound combinations, syllable formation, word building, syllable recognition, vocabulary development, sentence reading, paragraph reading, and use of a book.

Character Recognition. The first instructional activity was planned to develop character recognition skills. Flash cards were prepared to teach the sounds that correspond to the characters in the i.t.a. alphabet. The 44 character alphabet was divided into nine groups, eight of five and one of four characters. Each of the 44 flash cards was illustrated with a pictograph relating to the sound of the character on the card. (See Figure 18.) These character/pictograph cards were left unbound. A second set without the pictograph was prepared also.

Another set of character recognition cards was prepared and subdivided into the same groupings as above. These were bound into booklets with an additional booklet of all 44 characters. The booklets were numbered one through ten.

Figure 18
Illustration of Selected i.t.a. Character
Cards with Pictographs
(Shown actual size.)



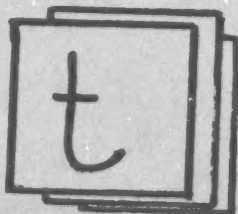
In addition, a matching game was prepared to correspond to the subgroupings. The game board was divided into fifteen squares and was accompanied by fifteen game pieces. Each space on the board and each game piece was marked with a character that corresponded to those introduced in the previous lesson. (See Figure 19.) The directions for this exercise were: "Choose a small square with a character written on it, say the sound for the character, and then cover the place on the board where that character appears." Separate games were prepared for use as the number of characters increased. One corresponded to the first subgroup of letters; one to the first and second combined; and one to the first, second, and third combined. The other two game boards corresponded to the fourth, fifth, and sixth subgroups combined and the seventh, eighth, and ninth subgroups combined.

Vowel/Consonant Sound Combinations and Syllable Formation. The second instructional activity was planned to provide practice combining vowel and consonant sounds. The flash cards without pictographs were used to form pairs of letters. The second instructional activity led directly to the third, that of combining several letters to form syllables. A reading booklet with all the possible combinations of the first subgroup of letters was prepared. The characters were combined in a consonant/vowel/consonant pattern. Some examples from the first booklet were tab, bit, nab, and bin. The second booklet drew on a field of ten characters and the third on fifteen. Any possible combinations of letters to form "words" were used. By the fourth and fifth booklets, however, only those combinations that actually were words were employed. This decision was made because of the unwieldy number of

Figure 19

Illustration of an i.t.a. Character Matching Game

b	a	i	n
n	i	t	b
a	t	i	a
i	b	n	#1



permutations possible with 20 or 25 characters. These booklets were similar in size and color to the alphabet recognition cards that had been bound into subgroups and numbered. The word booklets were numbered to correspond to the character booklets as well.

Additional flash cards were prepared at this stage to provide further practice with words. These cards were unbound and were based on groupings by final consonant. For the character "t," fourteen combinations were selected in a vowel plus final consonant pattern. Several words with the same ending were grouped together. For example, the " it" ending group contained the following words among others: bit, nit, and kit. For the character "n," thirteen combinations were used and five were used with "g" as the final consonant.

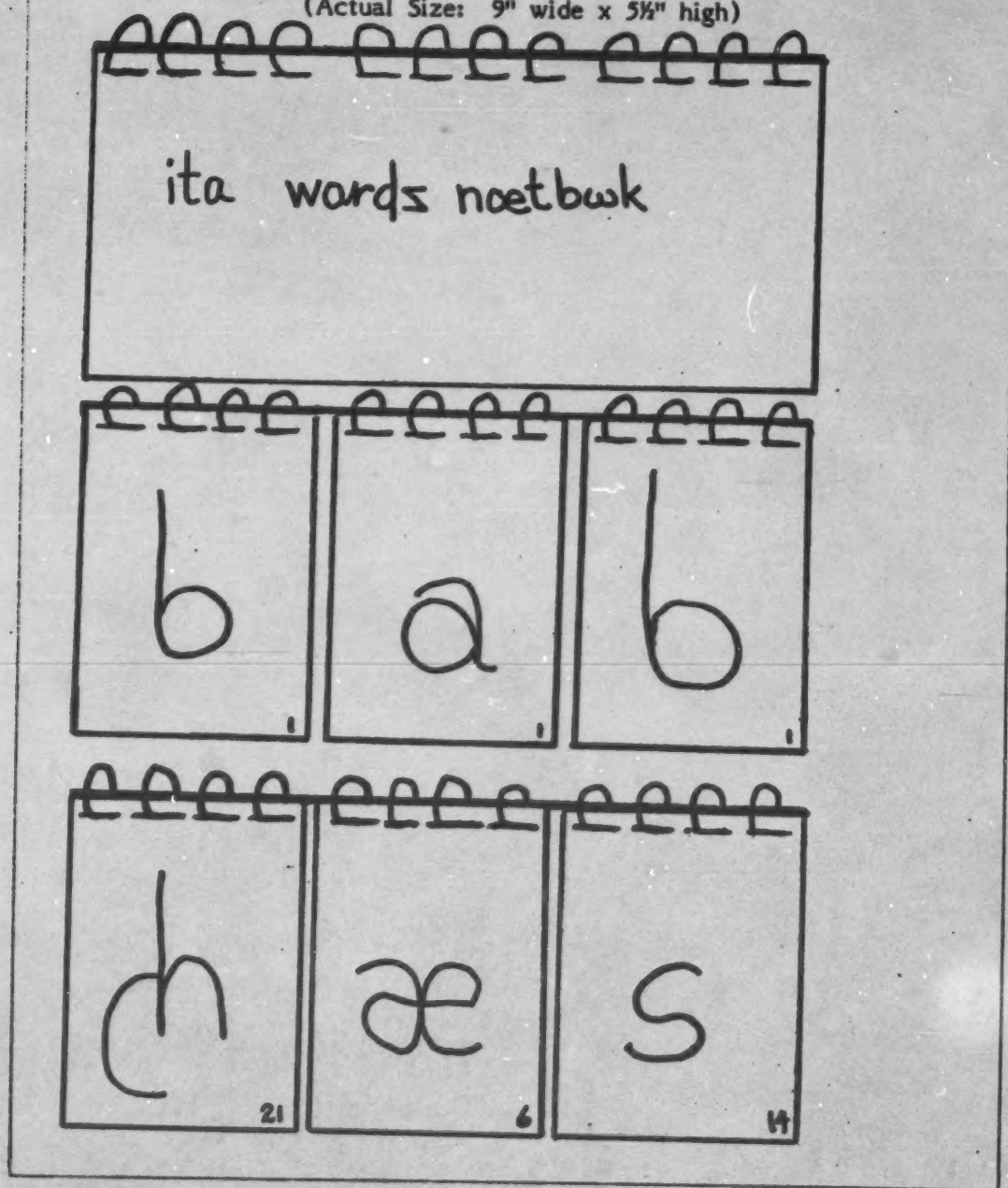
Word Building Exercise. The fourth set of instructional activities was planned to develop word building skills. One exercise employed a booklet with divided pages. Each page was cut into three sections. Each left hand piece had a consonant on it, each middle a vowel, and each right hand piece a consonant. Since each section of the page could move independently, the booklet was in effect three sets of characters in one binder. For example, the first set of letters "b - a - b" could be changed to "c - a - b" by moving only one section. As a further example, moving two pieces of the right hand section would then produce the combination "c - a - d" and so on. (See Figure 20.)

Another facet of the word building exercises was the introduction of blends. Booklets of words ending in consonant blends were prepared, one set for each consonant blend to be taught. The cover of the booklet was marked to indicate the blend it contained, e.g., nt. The first booklet had the words in two colors,

Figure 20

Illustration of a Booklet with Divided Pages

(Actual Size: 9" wide x 5½" high)



the initial consonant/vowel in one color and the final consonant blend in another. The second booklet was identical to the first with the exception that the entire word was written all in one color.

More work on blends was available in the next instructional activity. These were unbound flash cards to provide work on the consonant blend/vowel/consonant blend pattern. The cards were divided into three groupings: initial consonant blend written in blue ink followed by a line, e.g., sn____, medial vowels written in red; and final blends written in green and preceded by a line, e.g., ____nt. The instructions for these cards were: "Select one each of blue, red, and green cards. Fit them together to make a word. Pronounce the word after you have it together. Put those back and begin again with other cards."

Syllable Recognition Exercises. The fifth instructional activity was planned to deal with syllable recognition. Hannenberg (1966) suggested employing a light dot to separate syllables while writing the word in the same way it would be written without the dots (p. 207). Another approach which was employed was the use of a master word card and other cards with syllables on them. For example, the word spaghetti in i.t.a. is "spegete" and divides into syllables "spe-get-tæ." The learner then would be given four cards, one for the whole word and one for each syllable. The instructions for the exercise are: "Place the whole word card in front of you. Arrange the syllable word cards in order to match the whole word in front of you. Practice saying the word as you put it together. Repeat the word two times before going on to the next word."

Vocabulary Development Exercises. The sixth instructional activity was vocabulary development. Alan was presented with vocabulary booklets. The words in the first vocabulary booklet were the list known as the Dolch Basic 220 Word List (Dolch, 1948, p. 105). The words were transliterated into i.t.a. A second list of words that he would need for use in everyday work was also prepared. The vocabulary in this case related to his vocation. The extra word lists were prepared in another way also. The words were those suggested by the learner in conversation either implicitly or explicitly. That is, the list was both of words that the learner had expressed an interest in learning to read and of words that the instructor perceived to be problems for Alan based on difficulties in pronunciation during previous lessons and interviewing.

Another game was prepared to supplement this instruction. The game board was marked off into 2" rectangles, each containing an initial consonant. The game pieces had vowel/consonant combinations written on them. The instructions for the game were "Select a game piece and use it some place on the game board to make a word. Say the word aloud. Continue until you have completed all the spaces on the board." The game included more game pieces than there were spaces so that the learner's responses could vary from one game to the next. (See Figure 21.)

Sentence Reading Exercises. The seventh instructional activity was sentence reading. The practice for this activity was based on the use of 8½" x 11" cards, both bound and unbound, with sentences written on them. The vocabulary in the sentences was derived from the Dolch list mentioned previously. The sentences were simple ones such as "I want him to help me

Figure 21

Illustration of a Word Building Game

(Actual Size: 9½" wide x 11" high)

d un	h	c ap
m	s	p
v	f	wh
r ip	n	t in
j	k it	g
y	th	z
w in	b	l

at n

fiend her" and "doen't eet ~~and~~ drink befor fiev twode." Another activity possible in the pattern of previous lessons would be the use of a main sentence card with supplementary words that the learner matched up to the sample. A further possibility would be the use of vocabulary flash cards that the learners could manipulate to create sentences of their own.

Understanding basic punctuation was seen as an aspect of sentence reading and was introduced along with the sentence reading practice. Those covered in the lessons were the period, comma, question mark, and exclamation mark. The punctuation marks were on pieces of heavy paper $1\frac{1}{2}$ " wide and $3\frac{1}{2}$ " high. They were sized to coordinate with the sentence cards used in the same unit.

In using the punctuation with the sentences, Alan was faced with both new reading and new markings. The following procedure was used to provide intensive practice with the punctuation. A set of cards with simple sentences was prepared to be read successively with different punctuation marks. The learner was instructed: "Place the sentence card in front of you. Put one of the punctuation cards at the end of the sentence. Read the sentence aloud. Change the punctuation card at the end of the sentence. Read the sentence aloud again. Continue with the same sentence until you have used all the punctuation cards." Some of the sentences used were "fiend that haw, goe twode car, and hee isn't hær." Additional lessons to deal with apostrophe and quotation marks were also used.

Paragraph Reading Exercises. The eighth instructional activity was paragraph reading. Alan was again presented with cards about $8\frac{1}{2}$ " x 11" and unbound. The paragraphs contained between five and ten simple sentences each. The subject matter was adult oriented. The paragraphs were open-ended. Each

paragraph set up a situation and ended before the situation was resolved. Shuman (1967) stressed the value of open-ended stories with those learners "who have severe reading handicaps" (p. 18). Heding et al. (1967) compiled a list of adult oriented topics which also were used as a guide (p. 167). The topics compiled by Heding et al. are listed in Figure 22.

Using a Book. The ninth instructional activity was the use of a book. The book chosen had adult-oriented paragraphs. It was a reader from the "Breakthrough" materials (Fink and Clavering, 1967). After reading a passage in the book, Alan was introduced to other aspects of a book. The instruction included details about how to find the title and the author's name, as well as the reason for and the use of a table of contents.

Overall Goal of Materials. Each of the instructional activities had a purpose that transcended the nature of its specific skill development. Each of the steps was part of a greater exercise to desensitize Alan to the use of books. To the nonreader, the book might seem like an impenetrable mystery. The steps in the reading program here are designed to teach the components of a book without exposure to a book at an early stage. If the program were successful, the first encounter with a page of a book would not be perceived as eight inches of undecipherable writing, but as an understandable compilation of familiar elements. The book, it was hoped, would appear to him as a known, a jig-saw puzzle with a known configuration, not an unsolvable problem. The awesome book would be reduced to a grouping together of words, then sentences, then paragraphs that have already been conquered by the learner in previous lessons.

Figure 22

Topic Guidelines as Compiled by Heding et al.

(Heding et al., 1967, p. 167)

Topics Deemed of High Interest

1. Current events
2. How to handle money
3. Homemaking
4. State, local, and national government
5. History
6. Biographies
7. Information on tax returns and social security
8. Stories of other countries
9. Science — plants and animals
10. Mechanics
11. Automobile insurance
12. Filling out applications and forms
13. Sports and recreation
14. Personal grooming

Topics Deemed Inappropriate

1. Books about children's experiences
2. Technical topics
3. Children's books
4. Controversial religious issues
5. Topics that make the learner feel inferior

Evaluation of the Learner's Skill Attainment

The fourth step in the instructional model is evaluation of the learner's attainment. In the study conducted, full evaluation was problematic. For objective posttesting, Gray Oral Paragraphs, Form B, was used. The grade level placement was 1.7 the same as before the instructional period.

Alan was reading adult materials in i.t.a. but had not begun transition to traditional orthography. (See Figure 23.) He could not be tested with measures in t.o. with any reliability. There were no measures known to be available in i.t.a. to test Alan in a comprehensive manner.

The stated goals of the project had been accomplished. Operationally stated at the end of 20 hours of instruction Alan:

- knew the sound associated with each i.t.a. character.
- was able to form one syllable words by combining characters.
- was aware of word attack skills for use in reading multisyllable words.
- was aware of basic punctuation (comma, period, question mark, and exclamation point).
- was aware of basic reading units (i.e. sentence, paragraph).
- was able to read the 220 words found on the Dolch Basic Word List when they were written in i.t.a.

In addition, Alan had learned about the use of apostrophe and quotation marks.

Alan was beginning the transition to traditional orthography although no formal transition lessons had been given. He stated that he was able to read the television guide, excepting certain words, for himself for the first time. This behavior was consistent with the findings of other research using i.t.a. with adults in remedial reading situations (Stevenson, 1973, p. 41).

Figure 23 (removed due to copyright restrictions)

An Example of a Passage in i.t.a. Read by the Case Study

Subject after 20 Hours Instruction

(Fink & Clavering, 1967, Phase II, Book 5, pp. 1-2)

Further subjective conclusions about the success of the instructional unit can be based on Alan's attitude toward reading lessons and the use of i.t.a. as a medium. His confidence grew as the reading lessons progressed. After completing the tutorial sessions, he enrolled in a traditional remedial reading class given at a local high school one evening each week. When questioned about his reactions to the use of i.t.a., Alan's response was very positive. He said, "I don't know about using i.t.a. [in other situations], but as far as I'm concerned, for adults, it's the only way."

Materials Development Evaluation

It must be stated that no attempt is made here to provide quantifiable documentation of results associated with this study. On a very general basis, the evaluation is that the materials were good. They worked; Alan did learn to read in i.t.a. after 20 hours instruction. That was the goal established for the use of the materials. The materials were developed to see if i.t.a. would work when used in this fashion. The case study provided a trial run of sorts. This trial showed the researcher where to modify and improve the materials as the use of them dictated. Some modifications were made and incorporated as the lessons progressed. The changes were minimal, limited mainly to changes in the amount of work per unit of instruction and to additions of "games" for extra practice. No true evaluation is presented here. These materials must be considered to be in the initial experimental stages. The outline which follows contains suggestions for further use of the materials after which an appropriate evaluation could be made. The outline is intended to be a model for a full summative evaluation project.

Outline for a Materials Development and Summative Evaluation Project

- I. Set up materials in units for a program with suggested time frame and formulate a complete teacher's manual.
 - A. Teacher's manual should be in two forms:
 1. One for trained adult basic education (ABE) teachers.
 2. One for volunteer tutors.
- II. Develop measures to test achievement at the end of each unit of the materials.
 - A. The measures developed should provide quantifiable data for statistical analysis.
 - B. There should be provision for subjective evaluation and comments as well.
- III. Implement materials and measures with an adult learners group under controlled conditions.
- IV. Prepare materials and measures for full scale experimentation based on data from the early research.

A brief discussion of the outline is necessary. The materials were used in this study without being in any prescribed units. That method can work in a tutorial setting with one learner and the originator of the materials as the tutor. To use the materials in a validating study, however, they must be in units or chapters so that each instructor is doing the same thing at the same time. This would provide consistency for the experimental group. No determination of whether a unit of material is formulated correctly can be made without having several teaching sessions which duplicate the same routines.

The need for two sets of teachers' manuals is obvious. If the materials in l.t.a. are to be widely distributed, complete instructions must be available both for the professional with training in the teaching of reading and the interested citizen with no training.

The measures for achievement testing after each unit should be formulated from the materials in the unit. The purpose of the measures is not to see how clever the learner can be but to see how effective the materials have been for conveying reading instruction. Popham and Baker's suggested fourth step of evaluation can be pursued by careful observance of the results of the measures.

Although the statistics developed from the study outline a picture of the program results, inclusion of anecdotal comments and subjective evaluation, in effect, adds color to the picture. The proposed materials development and summative evaluation project is preliminary step before a large scale experiment using i.t.a. materials can take place. As such, all additional information that can be gathered is needed.

Implementation of the materials and measures with an adult learners group must be under regulated conditions. There must be preestablished guidelines both for the experimental and the control groups. The data must be collected in a proper scientific manner and the reports collated according to proper procedure.

The results of the project proposed here would provide a reliable summative evaluation for the materials developed in this study. The materials could then be prepared for use in a major project comparing literacy materials in i.t.a. which were designed for or have been used for adult learners.

Careful research design must be a part of the two studies suggested in the previous paragraphs. Downing (1970) has made serious charges about American commentary on research. He criticized the design of the research by Mazurkiewicz and others (p. 70). He accused Mazurkiewicz of misrepresenting British research (namely Downing's own) in journal and conference reports (p. 71).

He also claimed that research findings were altered when reported in the i/t/a Bulletin, a publication of the company that published the texts written by Mazurkiewicz and Tanyzer, the "Early-to-Read" series. Downing's article serves as a stringent reminder that thorough knowledge of research design is necessary before basing any conclusions on the findings of a particular study.

To be worthy of the time invested in them, the materials development and evaluation projects must be worthy of acceptance in the mainstream of i.t.a. research.

CHAPTER V

Summary and Conclusions

Summary

The burden of illiteracy is shared by people throughout the world. In a technologically advanced society, such as that in the United States, the burden imposed by illiteracy is multiplied. Adults who cannot read, can find the requirements of daily life difficult to meet. For those who have attempted to read and have failed at using traditional orthography, a new approach might be indicated. An initial learning medium for use in beginning reading instruction is one possibility.

Sir James Pitman developed the initial teaching alphabet to aid the native born, English-speaking individual in learning to read. Pitman based the alphabet on a foundation of research dating back to 1569. This alphabet was designed to correspond to the 40 (or 40+one) primary values of the phonemes of the English language. It was designed to resemble the traditional alphabet so that transition from the initial teaching alphabet to convention characters and spelling could be easily accomplished. This concern for the ease of transfer distinguishes Pitman from the group of reformers interested in non-roman alphabets. One of the latter was developed as a result of a bequest given by George Bernard Shaw, providing for an alphabet contest, of which Pitman served as director.

A thorough background for the development of the initial teaching alphabet is presented by Pitman and St. John (1969), recounting the historic and linguistic

bases for the initial learning medium. Downing (1967) presents an overview of research using the initial teaching alphabet in Great Britain. Other texts detailing research projects conducted with i.t.a. are readily available. Few, however, deal with the use of i.t.a. with the functionally illiterate adult.

While no specific definition of the functionally illiterate adult is universally accepted, the functionally illiterate adult can be defined as an adult whose reading skills are below a level where the individual is able to deal with daily life effectively. The direction of research in the 1970's has been to view reading skills as a larger development problem than mere grade-level placement. The Adult Performance Level criteria developed by Northcutt et al. (1975), relate literacy skills to accomplishment in areas of competence in daily life, broadening the definition of the term "literacy."

Materials in i.t.a. for developing literacy skills in adult populations are available on a limited basis only. Heding et al. (1967) developed a series of materials that were then used by Brown and Newman (1968) in their research. The i.t.a. Foundation in Great Britain has introduced a set of programmed materials for experimental use. Heding et al. used the materials that they had developed during research in Missouri. They did very limited field testing, having less than twenty subjects on whom to base their statistics. Brown and Newman (1968) used part of the materials developed in Missouri in their research with "city-core" illiterates in the Buffalo, New York area. Other research has been conducted with military draftees in Great Britain and with prison populations in Oregon, California, Tennessee, and Alabama.

All of the research done with adults has one common thread. The conclusions support the use of i.t.a. and yet none of the materials have been

validated in a scientifically controlled manner. Each project used either its own or another study's experimental materials. The lack of a reliable, properly validated set of materials hampers the extension of the use of i.t.a. with functionally illiterate adults.

Materials development was a part of the thesis presented here as well. Preparation of an instructional design model preceded the preparation of materials. In addition, a plan for implementation and evaluation of the model was prepared. The evaluation plan was based on the use of a case study for formative evaluation.

After careful predetermination of the skills to be taught, the materials were developed. Then the subject of the case study was interviewed to preassess his needs. The instructional activities were designed following those steps and implemented in the tutorial sessions. The program of instruction included prereading and basic reading skills during 20 hours instruction in reading using materials in the initial teaching alphabet. The case study subject did learn those basic skills outlined. The materials have not been evaluated fully; however, an outline for a full summative evaluation project has been included.

In summation, the initial teaching alphabet can be a successful medium for use with functionally illiterate adults. The use of i.t.a. can give the learner who failed a chance to begin again. After mastering i.t.a., the learner can continue with newly gained confidence and broach traditional orthography again. The learner in this study expressed his feelings about i.t.a., saying, "... as far as I'm concerned, for adults, it's the only way."

Recommendations for Further Research and Evaluation

The outline that was designed to be the last step for this thesis also can serve as the first step for a full materials evaluation project. After that study, the materials would be validated and ready to use for a large scale project. That project would utilize a large sample. The experimentation should not deal with the question of the initial teaching alphabet versus traditional orthography. The major study should involve and evaluate all the materials in i.t.a. for functionally illiterate adults by comparing them to one another. In that way, valid assumptions could be made about which materials best serve each of the needs evidenced by functionally illiterate adults. After such a study is conducted with properly established experimental and control groups, a composite program of i.t.a. materials can be prepared. The literacy materials would be assembled on the basis of the conclusions from the materials evaluation project.

Once that research is completed, and the materials are assembled into a marketable package, the path will be clear for full implementation of a massive public information effort. This distribution of information must reach both the general public and the reading professionals. The obvious benefits of i.t.a. for the learner with minimal or negligible reading skills must be explained. Presentations should be held at literacy training centers throughout the United States. Professors in related fields at colleges and universities must be offered the opportunity to become familiar with the assets of an i.t.a. program. They are in the best position to encourage further research.

At all times, close contact must be maintained with the i.t.a. Foundation. The major study that is proposed here would provide an opportunity for careful

examination of the materials now available. Pitman's concern for protecting i.t.a. from the effects of "Babelization" is well founded. The established conventions must be observed. All materials that purport to be in i.t.a. should really be in the initial teaching alphabet. The i.t.a. Foundation certifies materials to verify their compliance and this procedure should be continued.

Conclusions

There are two directions for further study that become apparent as a result of the research required for this thesis. First, a model of the functionally illiterate adult which would be generally acceptable must be formulated. The APL study provides a skill model but as Kavale and Lindsey (1977) stressed, there is a need for a "significant body of knowledge about the characteristics of illiterate adults" (p. 370). Once that body of knowledge is formulated, research in materials development, whether in i.t.a. or not, will be more effective.

Second, the area of comparing available i.t.a. materials of all types for use with functionally illiterate adults must be explored as suggested earlier in this chapter. (See Appendix D for selected examples of materials.) Brown and Newman, in using the materials developed by Heding et al., began the process. The new materials from the i.t.a. Foundation, with minor modifications of jargon, etc., could be used in conjunction with other materials, for example, the excellent flash cards with pictographs distributed by Sturgis. By comparing what is available, the best of each can be compiled into one program — a program that is both effective and comprehensive.

Personal Observations

No matter what programs are used, certain conditions are common throughout adult basic education endeavors. Rauch (1969) compiled an excellent guide for the volunteer tutor. Other literature discusses the process of teaching adults. Yet, in the opinion of this researcher, no one ever has described to a full extent the frustrations that surround one aspect of teaching adults. It is true that adults have the motivation to succeed in the lessons. The only problem is that so many things can happen which prevent that motivation from being utilized. That is, many times the learner just will not show up! These occasions are difficult ones for the instructor, whether a tutor, researcher, or teacher.

The instructor may wonder what education related occurrences precipitated the absence. Most likely, however, it is not education related. The car was being used by someone else, the learner overslept, a friend wanted help repairing a CB radio, the spouse needed a ride to the doctor, or the children wanted to do something with the learner — these are but a few of a myriad of excuses. It is important to note that the absences as explained are not related to the lessons at all. The absences, however, are a complication on many levels. Research schedules are disrupted and data with time bases are altered. The researcher gains a better understanding of the conveniences of conducting research with a group of prisoners! Yet the results of a successful program, whatever the class size, obliterate most of these bad memories. Perhaps the solution is to provide each new instructor of adults with a plaque. Inscribed in bold letters would be the following message:

DON'T GIVE UP!
IN THE END, IT'S WORTH IT.

"EACH ONE, TEACH ONE" PROGRAM BY FRANK C. LAUBACH**"Each One, Teach One" Program By Frank C. Laubach**

Frank C. Laubach has organized and conducted literacy training programs in 96 countries using 274 different languages (Laubach & Laubach, 1960, p. 1). His program is called "Each One, Teach One" and he claims to have a "well-rounded plan for liquidating illiteracy in any country — swiftly and completely" (p. 1). Laubach claims that his program works in every language "except English" (p. 2). Laubach's reports are those of a missionary not a student of linguistics. As such they are commentaries on his experiences, which he recounts as missionary successes in the field of literacy training. The reports are not of a scientific nature and do not include data for statistical verification of results.

Selected examples of Laubach's "Each One, Teach One" materials are presented here. These include instructions for use of a wall chart (Figure 24), a portion of a wall chart (Figure 25), and a portion of the tutor's plan for chart instruction (Figure 26).

Figure 24
Basic Instructions for Use of a Wall Chart for the
"Each One, Teach One" Materials

HOW TO TEACH THE CHART

"Engliddish," like Hebrew, reads from right to left. So the chart is on the right and the reading lesson on the left. While teaching let your finger or pencil travel in a right to left direction below each word and sentence as it is read.

You may point with your finger, or with a pencil. Some teachers use a small piece of paper to cover portions of the word, as instructed. Be careful never to obstruct the student's view.

We recommend that you have the student on your left. The chart and reading lesson may be on the table, or pinned to the wall. When you can teach them well, you may wish to cut off the instructions.

The arrow shows where to point on the chart above. The shaded area shows what to cover up. The words are what the teacher says at each step. The teacher waits for the student to answer, before going to the next step. If the student hesitates, the teacher should help — but don't repeat a correct answer.

Figure 25

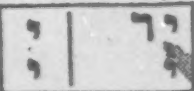
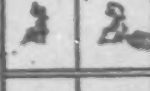
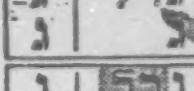
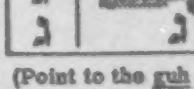
Selected Example from a Wall Chart in the
 "Each One, Teach One" Materials

"Engliddish"

י י	י י		
ג ג	גרל ג		
ד ד	דאָג ד		
נ נ	נאָז נ		
מ מ	מאָטה מ		
ר ר	ר'ם ר		

Figure 26

Tutor's Lesson Plan for Wall Chart Instruction with the
"Each One, Teach One" Materials

1.  This is an ear. Say ear.
(In each step, wait for student to answer.)
2.  This looks like an ear.
Say ear.
3.  This is how we write ear.
Say ear.
(Pencil goes in right to left direction under the word.)
4.  Ear begins with the sound ih. Say ih.
5.  Say ih again.
6.  Say ih again.
7.  And again.
8.  This is a girl sitting down.
Say girl.
9.  This looks like the head and knees of a girl.
Say girl.
10.  This is how we write girl.
Say girl.
11.  Girl begins with guh.
Say guh.
12. (Point to the guh just below.) Say guh again.
13. (Point to lower guh at left.) Say guh again.
14. (Point to upper guh at left.) Say guh again.
15. (Review by pointing to one ih only above.)
Remember this? (ih)

APPENDIX B
INFORMATION ABOUT THE
INITIAL TEACHING ALPHABET FOUNDATION

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Information About the Initial Teaching Alphabet Foundation

The initial teaching alphabet Foundation has offices in the United States and in Great Britain. The Foundation maintains libraries of information about the initial teaching alphabet. The Foundation offers assistance to those interested in information about the initial teaching alphabet. Assistance in planning workshops, locating speakers and loans of materials are some of the Foundation's support capabilities.

It is suggested that the initial teaching alphabet Foundation be contacted for further information as needed. In New York, the address is:

i.t.a. Foundation
52 Vanderbilt Avenue
New York, New York 10017

In Great Britain, the address is:

i.t.a. Foundation
2 Alma Road
Reigate, Surrey RH2 ODA
England

Sources for i.t.a. Materials

Educational Research Council of America
614 W. Superior Avenue
Cleveland, Ohio 44113
Telephone: (216) 696-8222

i.t.a. Foundation
52 Vanderbilt Avenue
New York, New York 10017
Telephone: (212) 682-9020

i.t.a. Foundation
2 Alma Road
Reigate Sumery RH2 0DA
England
Telephone: Reigate 49 428/9

i.t.a. Publications, Inc. (See Lear Siegler, Inc.)

Lear Siegler, Inc./Fearon Publishers
6 Davis Drive
Belmont, California 94002
Telephone: (415) 592-7810

Pitman Publishing Company
6 Davis Drive
Belmont, California 94002
Telephone: (415) 592-7810

Sturgis, Division of Library Products, Inc.
P. O. Box 130
Sturgis, Michigan 49091
Telephone: (616) 651-5076

Selected Examples of Materials in i.t.a.

Selected examples of materials in the initial teaching alphabet will be presented in the following order:

"Breakthrough" materials

- Figure 27: Phase I: Basic Skills — Writing Practice.
- Figure 28: Phase I: Basic Skills — Paragraph Reading.
- Figure 29: Phase I — Basic Skills — Work Sheet
- Figure 30: Phase II: Extending Basic Skills — Story Reading.
- Figure 31: Phase II: Extending Basic Skills — Work Sheet.

"Freedom to Read" materials

- Figure 32: Flash Card — Side A.
- Figure 33: Flash Card — Side B
- Figure 34: Work Sheets: Writing Practice
- Figure 35: A page from the "Hunting Without Guns" booklet.

"Language for a Future" materials

- Figure 36: Reader story in i.t.a.
- Figure 37: Reader facing page in t.o.

Materials from Brown & Newman

- Figure 38: Comprehension questions for "The Ride to Work.
- Figure 39: Samples from visual discrimination worksheets.

"Self-instructional Programme for Adult Illiterates" materials

- Figure 40: Selected lines from the workbook to accompany tutor's instructions.

Tutor's Instructions. The instructions for the workbook pages are dictated by a tutor onto an audio-magnetic cassette. The workbook lines are illustrated in Figure 40.

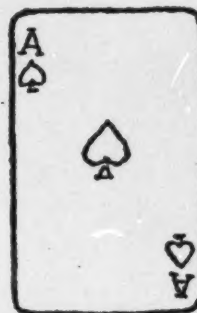
Figure 27

Selected Examples of the "Breakthrough" Materials"

Phase I: Basic Skills -- Writing Practice

æ as in æs

æ æ æ



this is the æs ov spæds.

sæ the wurd that næms the pictuer.

as yow sæ the wurd, riet æ on the lien.

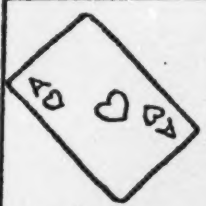
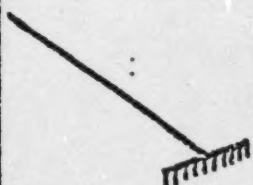
			
æ s	sp _ d	ch _ n	c _ n
			
b _ by	sn _ k	r _ k	h _

Figure 28

Selected Example of "Breakthrough" Materials

Phase I: Basic Skills -- Paragraph

Surpries! Surpries!

Sum men tæk þær wievs for granted.

tø men from sault læk sity started on
a trip wiþ þær wievs. þæ stoppt for gas
along þe wæ. þær wievs got out.

about twenty miels læter, a car with a
stæt trøper, stoppt þem. hē had a messæj
for þe men. it sed, "Wœn't' yø cum back
and get us?" it wox from þær wievs, hō
wer still at þe gas stæþon.

Figure 29

Selected Examples of the "Breakthrough" Materials

Phase I: Basic Skills -- Worksheet

16

practis

1. Copy eēh wurd, leevīg spæs after eēh syllabl.

lantern	_____	hundred	_____
numberr	_____	sity	_____
empier	_____	averæj	_____
bæsbaull	_____	fuetuer	_____
electric	_____	automobeel	_____
stæbl	_____	terribl	_____
entrans	_____	rœman	_____

2. Copy the first and the last wurdz of eēh
sentens on pæj 15.

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Figure 30

Selected Examples of the "Breakthrough" Materials

Phase II: Extending Basic Skills -- Story

rip van wickl

if yow hav ever tæken a trip up the hudson river in nue york stæt, yow hav seen the catskill mountæns. at the fot ov the moun-tæns, in the dæx when america still belongd to ingland, thær wor a smaull villæj. the villæj wor the hœm ov a simpl, god-nætuerd man. his næm wor rip van wickl.

aulthoe his ansestors had been sældiers, rip wor not liek them. hee wor god-nætuerd. besieds, hee wor a kiend næbor and a henpeckt husband. hee wor a fævorit ov the wimen in the villæj. the tok his part in aull his family kworrels and læd the blæm on his wief, dæm van wickl. the children ov the villæj shouted with joi whenever the saw rip, for hee aulwæs helpt them at thær gæms. hee mæd toiz for them and taut them to flie kiets and shoot marblz. hee told them storis ov gæsts, witches, and indianz. Whenever rip waukt throo the villæj, the children folloed him. the hung on his cœt and cliemd on his back. the plæd tricks on him that never mæd him aggry. Not teven the dogs barkt at him.

Figure 31

Selected Examples from the "Breakthrough" Materials

Phase II: Extending Basic Skills -- Worksheet

poot in the blank the word that mæks sens.

1. the dæ wox briet and sunny. the skie wox
_____. (cloudless / cloudy)

2. hee is a bræv man. in fact, ie believ hee is
_____. (feerfól / feerless)

3. ie liek yør dress with aull shoës shædx ov
red. it is very _____.
(colorless / colorfól)

4. ie hav not had eny fun. this has been a
_____ party.
(cheerfól / cheerless)

5. hee studis very hard. hee is a
_____ stuedent.
(cærfól / cærless)

6. that wox a silly thig tō dō. whie ar yō sœ
_____? (bræny / brænless)

Figure 32

Selected Examples from the "Freedom to Read" Materials

i.t.a. Character Flash Card: Side A

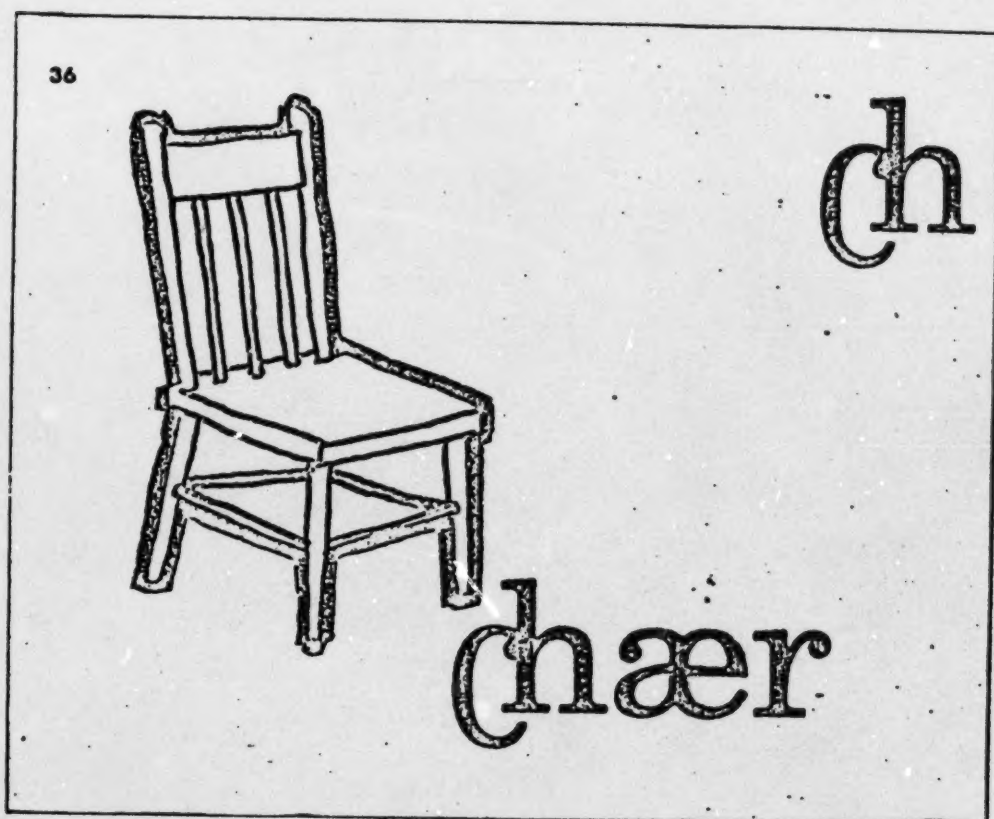


Figure 33

Selected Examples from the "Freedom to Read" Materials

i.t.a. Character Flash Card: Side B



chær



matches



wotch

Figure 34

Selected Examples from the "Freedom to Read" Materials

Work Sheet: Writing Practice

Worksheet #5. b

Writing the b sound:

Step one: make a straight line.	Step two: add a circle.			
				

Worksheet #35. ou

Writing the ou sound:

Step one: make a circle	Step two: a connecting line, then a short straight line	Step three: add upsided- down arch.	Step four: add a short line and retrace.	
				

Figure 35

Selected Examples from the "Freedom to Read" Materials

A Page from the Booklet Hunting Without Guns



le'm dan danner.. and

le'm disgusted!

Jim Jens is me best
frend. le men hee wos me
best frend. Næ frend wud ge
on a hunting trip without yw. le
men hee shudn't if hee nō yw wer
cumig.

Figure 36

Selected Examples from the "Language for a Future" Materials

Story: Facing Page in i.t.a.

He ried to work

Bill works hard all de in he fwa
factory. He factory is in he sily but
it is to melt from he apartment blddy.
Bill ried to work in a sily bus.

For men he liv in he sam apartment
blddy at Bill also work in he fwa factory.
He work all de in he factory. He ried to
work in he sam bus as Bill. Many men ried
to work in his sily bus.

	but	ried	he	from
	it	many	sam	ried
no words	melt	bus	at	men
	to			

au au

mm

Figure 37

Selected Examples from the "Language for a Future" Materials

"The Ride to Work" Facing Page in t.o.

The Ride to Work

Bill works hard all day in the shoe factory. The factory is in the city but it is two miles from the apartment building. Bill rides to work in a city bus.

Three men who live in the same apartment building as Bill also work in the shoe factory. They work all day in the factory. They ride to work in the same bus as Bill. Many men ride to work in this city bus.

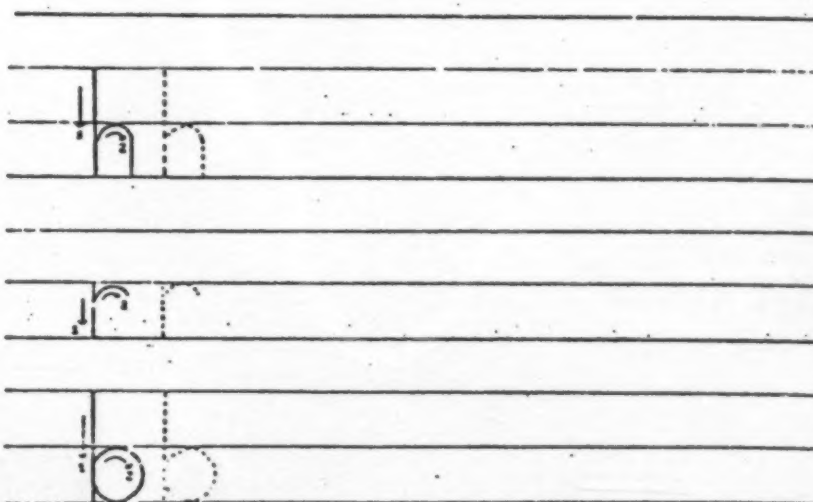


Figure 38

Selected Example of Brown and Newman's Materials
Comprehension Questions for "The Ride to Work"

COMPREHENSION
Lesson 6

Net t for trw and f for fauls

1. bill wurks hard aull dæ. _____
2. Mary wurks in a bus factory. _____
3. Meny men ried tw wurk in
a bus. _____
4. the factory is thre miels
from the apartment. _____
5. three men ried in the sæm
shw as bill. _____

Figure 39

Selected Examples of Brown and Newman's Materials
 Samples from Two Visual Discrimination Worksheets

Name: _____

Date: _____

Visual Discrimination #4

1.	æ	œ	ie	ue	æ	œ
2.	œ	œ	œ	æ	ue	ie
3.	ie	œ	œ	ue	ie	æ

LESSON I: C2

NAME: _____

DATE: _____

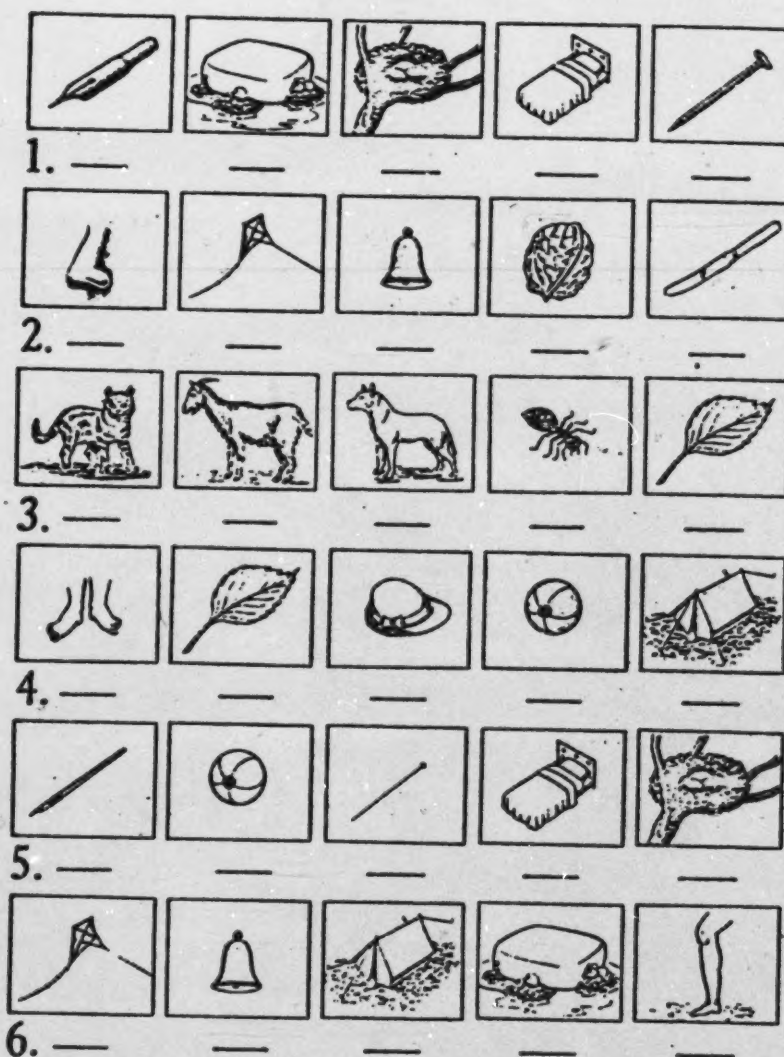
1.	wonts	wants	wæts	wills	wonts	wuef
2.	reed	ræd	reed	ræt	roed	riet
3.	spell	spæk	speek	spill	spun	spell

Figure 40

Selected Lines from the "Self-Instructional Programme
for Adult Illiterates" Workbook Distributed
by the i.t.a. Foundation

1

workbook



Tutor's Instructions: i.t.a. Foundation Materials

The following is an excerpt from the first lesson copied from the tutor's script:

In the past you have had some difficulty in learning to read — and so have many thousands of other people. I am going to tell you why you have had difficulty and then, with the help of this recording and, of course, some books, you are going to teach yourself to read in a way that is quite different from anything you have had before. All that you will have to do is to listen carefully and do the exercises which I will tell you about.

If you can talk to other people — which I am sure you can — and can understand what I am saying now, you already know how to use the English language. Of course, what you have learnt, you have learnt through your ears — the sounds you are now hearing come to your ears and then pass as a message to your brain which tells you what they mean. Reading is being able to get the same message to your brain, only through your eyes instead of your ears. To do this, the letters of our alphabet — the abc — are used to tell you the separate sounds of our language.

Part of the trouble in learning to read English is that the letters often let you down as the letters don't always say the same sound.

You are going to read, however, without having to bother about any of the usual difficulties, because you are going to learn with a slightly changed alphabet where each letter always says the same sound. But what you are going to learn to read will look so much like ordinary written or printed English that once you have learnt to read this way you will be able to read ordinary English just as easily.

The letters you see when you read stand for the separate sounds you hear when you speak. You must learn, therefore, the sounds of words, and then the letters which stand for them. To do this we are going to do some exercises. If you listen carefully you will not find them difficult.

You will do the exercises in your Workbook. I want you therefore to open your Workbook at page 1, and have a pencil ready. (pause, 5-10 seconds).

Now to begin with, I want you to listen carefully as I say this word, "net", "net" — you know the thing you catch a fish in — "net". Notice that the first sound in "net" is also the first sound in the words "nose", "nice", and "noise". Listen to these words again "net", "nice", and "noise". Now look at the first row in your Workbook. I want you to say to yourself the word of each picture in turn and to put a tick on the line underneath those pictures which begin with the same sound as the words "net", "nose", and "nice". Do that now and switch off the player while you do it.

Right, have you done that? You should have put a tick underneath the pictures of the "nib", the "nest," and the "nail". The other two pictures, the "soap" and the "bed" begin with different sounds.

I hope you managed to do that exercise. To make sure you know that sound here is another one. Listen again to the first sound in these words, "net", "not", "nest", "nail". Now look at the second row in your Workbook. — Say to yourself the word for each picture and put a tick on the line under those pictures that begin with the same sound as "net", "nib", "nice", and "noise". Switch off the player while you do that.

Have you done that? Let's see how you got on. You should have put a tick underneath the picture of the "nose", the "nut", and the "knife". Again the other two pictures, the "kite" and the "bell" begin with different sounds.

I hope you did that alright. I want you now to listen to the word "net" again, and this time to listen to the last sound — the sound that ends the word — "net", "net". It is the same sound that ends the words "pot", "mat" and "cut". Now look at the third row of pictures in your Workbook and say to yourself the name of each picture, and then put a tick on the line underneath those pictures which end in the same sound as "net", "pot", and "mat". Switch off while you do that. . . .

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